

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2016 Levee Maintenance Deficiency Summary Report**

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

***San Joaquin River Basin***

<b>RD0524</b>	Overall LMA Rating	Total LMA Miles						
<b>Reclamation District No. 0524 Middle Roberts Island</b>	<b>U</b>	<b>6.20</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.02	0.55	2.22	35.82%	0.01	0.06		
Trim / Thin Trees	0.19	0.96	4.03	65.02%	0.01			
Encroachments	0.09	0.07	0.37	5.97%	0.37	0.25		
Animal Control	0.31	0.20	1.11	17.91%				
Slope Stability	0.08	0.20	0.88	14.20%				
Erosion / Bank Caving	0.06	0.06	0.30	4.84%				
Crown Surface / Depressions / Rutting	0.05	0.04	0.21	3.39%				
Emergency Supplies & Equipment	0.06		0.06	0.97%				
Flood Preparedness & Training	0.06		0.06	0.97%				
<i>Supplemental</i>								
DWR Erosion Survey	0.03	0.38	1.55	25.01%				
DWR UCIP Field Study					0.34	0.03		
<i>LMA Totals:</i>	0.95	2.46	10.79	174.10%	0.73	0.34	0.00	0.00

<b>Unit No. 01 San Joaquin River LB</b>	Overall Unit Rating	Total Unit Miles						
<b>RD0524</b>	<b>U</b>	<b>6.20</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.02	0.55	2.22	35.82%	0.01	0.06		
Trim / Thin Trees	0.19	0.96	4.03	65.02%	0.01			
Encroachments	0.09	0.07	0.37	5.97%	0.37	0.25		
Animal Control	0.31	0.20	1.11	17.91%				
Slope Stability	0.08	0.20	0.88	14.20%				
Erosion / Bank Caving	0.06	0.06	0.30	4.84%				
Crown Surface / Depressions / Rutting	0.05	0.04	0.21	3.39%				
<i>Supplemental</i>								
DWR Erosion Survey	0.03	0.38	1.55	25.01%				
DWR UCIP Field Study					0.34	0.03		
<i>Unit Totals:</i>	0.83	2.46	10.67	172.16%	0.73	0.34	0.00	0.00

**Flood Control Project Maintenance  
Levee Inspections**  
**LMA District Cover Sheet**  
**Fall 2016 Levee Inspection Results**

**Reclamation District No. 0524 Middle Roberts Island**

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

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

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

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

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2016 Levee Inspection Results**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Left	6.20
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>U</b>	
Date of Inspection	4/12/2016 - 4/13/2016		10/10/2016 - 10/11/2016	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By	Mario Jaques RD 524		Mario Jaques RD 524	

**Summer & Winter Inspections**

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

DWR must be informed on the:

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

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

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

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

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

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	<b>0.00</b>	Rating **	A	Issue No.	<b>121</b>
LM End	<b>0.00</b>	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	<b>0.00</b>	Rating **	M	Issue No.	<b>123</b>
LM End	<b>0.00</b>	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	<b>0.00</b>	Rating **	M	Issue No.	<b>138</b>
LM End	<b>0.00</b>	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

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.19	Rating **	U	Issue No.	5
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					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM40.85]					

LM Start	<b>0.19</b>	Rating **	U	Issue No.	<b>5 (cont)</b>
LM End	<b>0.19</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SJR2016\_RD0524U01RM40.85\_1.jpg



Close view of the erosion.

Photo 2 of 3 : SJR2016\_RD0524U01RM40.85\_3.jpg



Close view of the erosion.

LM Start	<b>0.19</b>	Rating **	U	Issue No.	<b>5 (cont)</b>
LM End	<b>0.19</b>	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SJR2016\_RD0524U01RM40.85\_4.jpg



Close view of the erosion.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	<b>0.21</b>	Rating **	M	Issue No.	<b>3 (cont)</b>
LM End	<b>0.21</b>	Issue Type +	Ma	Location *	CR

LM Start	<b>0.21</b>	Rating **	M	Issue No.	<b>3 (cont)</b>
LM End	<b>0.21</b>	Issue Type +	Ma	Location *	CR

A photograph showing a long, thin, dark object, possibly a pipe or stick, lying horizontally on a gravelly surface. The object is dark and appears to have some texture or markings. The background is a light-colored, gravelly area, and there is some green vegetation visible in the distance.

A photograph of a metal rod with a black handle lying horizontally on a light-colored, gravelly surface. The rod is dark and appears to be made of metal. The handle is a solid black cylinder. The background is a sloping bank of light-colored gravel and small stones, with some green vegetation visible at the top edge.

Looking east at 3" depression on levee crown. (Spring 2012)

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.23	Rating **	U	Issue No.	201
LM End	0.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.938648 °	37.938648 °
				-121.343480 °	-121.343480 °
DWR ID	DWR_RD0524_01_f_2016_201				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Untrimmed trees on waterward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_201\_20161013\_00384.jpg



Looking east at untrimmed tree on landward slope.

LM Start	0.27	Rating **	U	Issue No.	179
LM End	0.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.938438 °	37.938438 °
				-121.342883 °	-121.342883 °
DWR ID	DWR_RD0524_01_s_2014_179				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Tree blocking view of waterward slope.					

Photo 1 of 4 : FA\_2016\_RD0524\_107\_179\_20161013\_00385.jpg



Looking east at untrimmed tree on waterward slope. (Fall 2016)

LM Start	<b>0.27</b>	Rating **	U	Issue No.	<b>179 (cont)</b>
LM End	<b>0.27</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA\_2016\_RD0524\_107\_179\_20160929\_00224.jpg



Looking east at untrimmed tree on waterward 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

## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	<b>0.27</b>	Rating **	U	Issue No.	<b>179 (cont)</b>
LM End	<b>0.27</b>	Issue Type +	Ma	Location *	WS

A gravel road stretches into the distance, bordered on the right by a thick line of green trees and shrubs. The sky is clear and blue. The road surface is light-colored gravel, and the vegetation is lush and green.

LM Start	0.30	Rating **	U	Issue No.	174					
LM End	0.30	Issue Type +	Ma	Location *	WS					
Category	Earthen Levee			GPS Latitude/Longitude						
				Start	End					
Item	Animal Control			37.938382 °	37.938382 °					
				-121.342352 °	-121.342352 °					
DWR ID	DWR_RD0524_01_f_2014_174									
Comment Code										
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.										
Inspector Comment										
Several rodent holes present at this site. No change at site during spring 2016 inspection.										

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.30	Rating **	U	Issue No.	174 (cont)	
LM End	0.30	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.938382 °		37.938382 °
				-121.342352 °		-121.342352 °
DWR ID	DWR_RD0524_01_f_2014_174					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
Several rodent holes present at this site. No change at site during spring 2016 inspection.						

LM Start	<b>0.30</b>	Rating **	U	Issue No.	<b>174 (cont)</b>
LM End	<b>0.30</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA\_2016\_RD0524\_107\_174\_20160929\_00219.jpg



Looking southeast at several rodent holes on waterward slope. (Spring 2016)

Photo 3 of 4 : FA\_2016\_RD0524\_107\_174\_20160929\_00218.jpg



Looking west at several rodent holes on waterward shoulder. (Spring 2015)

LM Start	<b>0.30</b>	Rating **	U	Issue No.	<b>174 (cont)</b>
LM End	<b>0.30</b>	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA\_2016\_RD0524\_107\_174\_20160929\_00217.jpg



Looking southeast at several rodent holes on waterward slope. (Fall 2015).

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.34	Rating **	M	Issue No.	180
LM End	0.34	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938461°	37.938461°
				-121.341626°	-121.341626°
DWR ID	DWR_RD0524_01_s_2014_180				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion is located along the lower level of waterward slope.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_180\_20160929\_00227.jpg



Looking southeast at erosion on waterward toe.

LM Start	<b>0.34</b>	Rating **	M	Issue No.	<b>180 (cont)</b>
LM End	<b>0.34</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_180\_20160929\_00228.jpg



Looking northeast at erosion on waterward toe.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.40	Rating **	U	Issue No.	16
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					
Comment Code					
Inspector Comment					
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.					
[2016 Site ID:RD0524U01RM40.99]					

LM Start	<b>0.40</b>	Rating **	U	Issue No.	<b>16 (cont)</b>
LM End	<b>0.40</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016\_RD0524U01RM40.99\_2.jpg



Front view of the site.

Photo 2 of 2 : SJR2016\_RD0524U01RM40.99\_4.jpg



Close view of the erosion.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 1 of 2 : FA\_2016\_RD0524\_107\_205\_20160929\_00246.jpg



Looking at slope damage on landward slope.

Photo 2 of 2 : FA\_2016\_RD0524\_107\_205\_20160929\_00247.jpg



Looking at slope damage on landward slope.

Photo 1 of 3 : FA\_2016\_RD0524\_107\_170\_20160929\_00210.jpg



Looking at slope damage on waterward shoulder (Spring 2016)

* 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



## Levee Inspection Report By Mile - Fall 2016


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 2 of 3 : FA\_2016\_RD0524\_107\_170\_20160929\_00211.jpg



Looking at slope damage on waterward shoulder.

Photo 3 of 3 : FA\_2016\_RD0524\_107\_170\_20160929\_00212.jpg



Looking at waterward slope erosion.

Photo 1 of 5 : FA\_2016\_RD0524\_107\_11\_20160929\_00018.jpg



Looking at bamboo on waterward slope. (Spring 2016)

* 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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.62	Rating **	U	Issue No.	11 (cont)	
LM End	0.63	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.938278 °		37.938247 °
				-121.336524 °		-121.336503 °
DWR ID	DWR_RD0524_01_s_2012_11					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Bamboo on waterward slope. Bamboo has been killed but still blocking view of waterward slope.						

Photo 5 of 5 : FA\_2016\_RD0524\_107\_11\_20160929\_00022.jpg



Looking at bamboo on waterside slope. (Fall Inspection 2012)

LM Start	0.63	Rating **	U	Issue No.	10
LM End	0.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938247 °	37.938247 °
				-121.336503 °	-121.336503 °
DWR ID	DWR_RD0524_01_f_2015_10				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion located next to and under bamboo.					

Photo 1 of 3 : FA\_2016\_RD0524\_107\_10\_20160929\_00015.jpg



Looking east at waterside erosion appears to be caused by runoff.

LM Start	<b>0.63</b>	Rating **	U	Issue No.	<b>10 (cont)</b>
LM End	<b>0.63</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA\_2016\_RD0524\_107\_10\_20160929\_00016.jpg



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

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

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.63	Rating **	U	Issue No.	10 (cont)	
LM End	0.63	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.938247 °		37.938247 °
				-121.336503 °		-121.336503 °
DWR ID	DWR_RD0524_01_f_2015_10					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Erosion located next to and under bamboo.						

Photo 3 of 3 : FA\_2016\_RD0524\_107\_10\_20160929\_00017.jpg



Looking east at erosion under bamboo on waterward slope.

LM Start	0.64	Rating **	M	Issue No.	13
LM End	0.65	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938105 °	37.938023 °
				-121.336288 °	-121.336173 °
DWR ID	DWR_RD0524_01_s_2012_13				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Depression extend from shoulder to mid levee slope two site with this section.					

Photo 1 of 4 : FA\_2016\_RD0524\_107\_13\_20160929\_00024.jpg



Looking southeast at depression on waterward shoulder fall 2015

LM Start	<b>0.64</b>	Rating **	M	Issue No.	<b>13 (cont)</b>
LM End	<b>0.65</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA\_2016\_RD0524\_107\_13\_20160929\_00025.jpg



Looking south at erosion on waterside shoulder.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.64	Rating **	M	Issue No.	13 (cont)	
LM End	0.65	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.938105 °		37.938023 °
				-121.336288 °		-121.336173 °
DWR ID	DWR_RD0524_01_s_2012_13					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Depression extend from shoulder to mid levee slope two site with this section.						

Photo 3 of 4 : FA\_2016\_RD0524\_107\_13\_20160929\_00026.jpg



View of the erosion.

LM Start	<b>0.64</b>	Rating **	M	Issue No.	<b>13 (cont)</b>
LM End	<b>0.65</b>	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA\_2016\_RD0524\_107\_13\_20160929\_00027.jpg



Update view of the erosion site.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.67	Rating **	M	Issue No.	949
LM End	0.67	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.937891 °	37.937891 °
				-121.335939 °	-121.335939 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:17563  
DS\_ID:20592  
EP\_NO: 6035  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: Flows from primer tank causing erosion on LS slope.  
FIELD\_STRUCT\_DESC: 48-inch pipe through levee 7.3 feet below crown. Siphon pumps and primer tank enclosed by cyclone fence on the landward shoulder. Gate valve at inlet sump 100-feet off LS toe. One concrete cutoff wall. (Permit No. 6035, 1968).  
FS Date: 8/16/2013

LM Start	<b>0.67</b>	Rating **	M	Issue No.	<b>949 (cont)</b>
LM End	<b>0.67</b>	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP\_FA\_2016\_17563\_29702.jpg



Signage for effluent pipe on WS shoulder.

Photo 2 of 2 : UCIP\_FA\_2016\_17563\_29701.jpg



Siphon Priming tank and associated pipes on LS shoulder.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	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					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: The erosion site is immediately downstream of the RR bridge. [2016 Site ID:RD0524U01RM41.36]					

Photo 1 of 1 : SJR2016\_RD0524U01RM41.36\_3.jpg



Close view of the erosion.

LM Start	0.74	Rating **	M	Issue No.	965
LM End	0.74	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.936951 °	37.936951 °
				-121.335132 °	-121.335132 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:41463					
DS_ID:20595					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Indicator Found					
UCIP Comments: Appears abandoned and should be done so properly.					
FIELD_STRUCT_DESC: 2.5-inch telephone conduit through levee 2.0 feet below crown and under the channel. Conduit visible on WS shoulder.					
FS Date: 8/16/2013					

Photo 1 of 1 : UCIP\_FA\_2016\_41463\_29717.jpg



Conduit visible on WS shoulder next to bridge abutment. Cable appears to be abandoned.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	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					

**Comment Code**

**Inspector Comment**

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.  
 [2016 Site ID:RD0524U01RM41.39]

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

Photo 1 of 2 : SJR2016\_RD0524U01RM41.39\_1.jpg



Front view of the erosion site.

Photo 2 of 2 : SJR2016\_RD0524U01RM41.39\_4.jpg



Front view of the erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.77	Rating **	U	Issue No.	262
LM End	0.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.936555 °	37.936555 °
				-121.334847 °	-121.334847 °
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\_2016\_RD0524\_107\_262\_20160929\_00264.jpg



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

LM Start	<b>0.77</b>	Rating **	U	Issue No.	<b>262 (cont)</b>
LM End	<b>0.77</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA\_2016\_RD0524\_107\_262\_20160929\_00265.jpg



Looking west at dense vegetation on landside toe. Spring 2014

LM Start	<b>0.77</b>	Rating **	U	Issue No.	<b>262 (cont)</b>
LM End	<b>0.77</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA\_2016\_RD0524\_107\_262\_20160929\_00266.jpg



Looking southwest at vegetation on landward slope and toe. (Spring 2013)

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.78	Rating **	M	Issue No.	950
LM End	0.78	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.936474 °	37.936474 °
				-121.334830 °	-121.334830 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:17571					
DS_ID:20596					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Large hole in pipe at WS toe. Appears abandoned and should be done so properly.					
FIELD_STRUCT_DESC: 8-inch steel drain pipe through the levee 4.0 feet below the crown. Pump at the toe of the landward slope (not found 8/16/13). Siphon breaker in 24-inch cmp Riser on the waterward slope. Originally included in the 1964 O&M manual.					
FS Date: 8/16/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_17571\_29719.jpg



Siphon breaker in 24-inch cmp riser on WS slope.

LM Start	<b>0.78</b>	Rating **	M	Issue No.	<b>950 (cont)</b>
LM End	<b>0.78</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP\_FA\_2016\_17571\_29718.jpg



Large hole in pipe at WS toe.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.	76
LM End	0.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.936444 °	37.936444 °
				-121.334797 °	-121.334797 °
DWR ID	DWR_RD0524_01_s_2012_76				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_76\_20160929\_00126.jpg



Looking southwest at low hanging tree branches at landside toe.

LM Start	0.81	Rating **	U	Issue No.	2
LM End	0.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.936093 °	37.936004 °
				-121.334648 °	-121.334615 °
DWR ID	DWR_RD0524_01_f_2013_2				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.					

Photo 1 of 6 : FA\_2016\_RD0524\_107\_2\_20160929\_00001.jpg



Looking west at large hole on landward shoulder (Spring 2016)

LM Start	<b>0.81</b>	Rating **	U	Issue No.	<b>2 (cont)</b>
LM End	<b>0.81</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 6 : FA\_2016\_RD0524\_107\_2\_20160929\_00002.jpg



Looking southwest at hole on landward shoulder.

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

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

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.81	Rating **	U	Issue No.	2 (cont)	
LM End	0.81	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.936093 °	37.936004 °	
				-121.334648 °	-121.334615 °	
DWR ID	DWR_RD0524_01_f_2013_2					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.						

Photo 3 of 6 : FA\_2016\_RD0524\_107\_2\_20160929\_00003.jpg



Looking west at hole on landward shoulder.

LM Start	<b>0.81</b>	Rating **	U	Issue No.	<b>2 (cont)</b>
LM End	<b>0.81</b>	Issue Type +	Ma	Location *	LS

Photo 4 of 6 : FA\_2016\_RD0524\_107\_2\_20160929\_00004.jpg



Looking southeast at finger erosion on landward slope.

LM Start	<b>0.81</b>	Rating **	U	Issue No.	<b>2 (cont)</b>
LM End	<b>0.81</b>	Issue Type +	Ma	Location *	LS

Photo 5 of 6 : FA\_2016\_RD0524\_107\_2\_20160929\_00005.jpg



Looking east at erosion on landward slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.81	Rating **	U	Issue No.	2 (cont)	
LM End	0.81	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Erosion / Bank Caving			37.936093 °	37.936004 °	
				-121.334648 °	-121.334615 °	
DWR ID	DWR_RD0524_01_f_2013_2					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.						

Photo 6 of 6 : FA\_2016\_RD0524\_107\_2\_20160929\_00006.jpg



Looking northeast at several finger erosion on landward slope.

LM Start	0.83	Rating **	U	Issue No.	22
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					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM41.44]					

Photo 1 of 2 : SJR2016\_RD0524U01RM41.44\_2.jpg



Close view of the erosion site.

LM Start	<b>0.83</b>	Rating **	U	Issue No.	<b>22 (cont)</b>
LM End	<b>0.84</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SJR2016\_RD0524U01RM41.44\_3.jpg



Front view of the erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.91	Rating **	U	Issue No.	33
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					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM41.5]					

Photo 1 of 2 : SJR2016\_RD0524U01RM41.5\_1.jpg



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

LM Start	<b>0.91</b>	Rating **	U	Issue No.	<b>33 (cont)</b>
LM End	<b>0.91</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SJR2016\_RD0524U01RM41.5\_2.jpg



Close view of the erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.93	Rating **	U	Issue No.	77
LM End	1.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.935259 °	37.935049 °
				-121.332864 °	-121.331334 °
DWR ID	DWR_RD0524_01_s_2012_77				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_77\_20160929\_00127.jpg



Looking south at low hanging tree branches at landside toe.

LM Start	0.96	Rating **	M	Issue No.	20
LM End	0.96	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.935181 °	37.935181 °
				-121.332297 °	-121.332297 °
DWR ID	DWR_RD0524_01_f_2013_20				
Comment Code					
T4 : Trim trees over roadway to at least 12 feet above ground level.					
Inspector Comment					

No Photos

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

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

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.97	Rating **	M	Issue No.	962
LM End	0.97	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.935178 °	37.935178 °
				-121.332029 °	-121.332029 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:22724  
DS\_ID:20597  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 - Location may be at LM 0.92 (37.935267, -121.332985) rather than LM 0.974. Need to field verify (DWR UCIP - thatch)  
8/16/2013 - Pipe abandoned and should be done so properly. (DWR UCIP -wwylie)  
FIELD\_STRUCT\_DESC: \*Abandoned\* 14-inch pipe through the levee 6.0 feet below the crown. Concrete pad for pump on WS shoulder. No pump or other appurtances remain. Originally included in the 1964 O&M manual.  
FS Date: 8/16/2013

LM Start	<b>0.97</b>	Rating **	M	Issue No.	<b>962 (cont)</b>
LM End	<b>0.97</b>	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP\_FA\_2016\_22724\_38442.jpg



Concrete pad for pump mount on WS shoulder.

Photo 2 of 2 : UCIP\_FA\_2016\_22724\_38441.jpg



Pipe visible on WS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.00	Rating **	U	Issue No.	47
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					
Comment Code					
Inspector Comment					
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. [2016					
Site ID:RD0524U01RM41.58]					

LM Start	<b>1.00</b>	Rating **	U	Issue No.	<b>47 (cont)</b>
LM End	<b>1.00</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016\_RD0524U01RM41.58\_1.jpg



Front view of the erosion.

Photo 2 of 2 : SJR2016\_RD0524U01RM41.58\_2.jpg



Close view of the erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	55
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					

**Comment Code**

**Inspector Comment**

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.  
 [2016 Site ID:RD0524U01RM41.59]

LM Start	<b>1.02</b>	Rating **	U	Issue No.	<b>55 (cont)</b>
LM End	<b>1.02</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SJR2016\_RD0524U01RM41.59\_1.jpg



Upstream view of the site.

Photo 2 of 3 : SJR2016\_RD0524U01RM41.59\_2.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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	55 (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					
Comment Code					
Inspector Comment					
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.					
[2016 Site ID:RD0524U01RM41.59]					

Photo 3 of 3 : SJR2016\_RD0524U01RM41.59\_4.jpg



Front view of the erosion.

LM Start	1.06	Rating **	M	Issue No.	942
LM End	1.06	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.934778 °	37.934778 °
				-121.330460 °	-121.330460 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18703 DS_ID:20600 EP_NO: 2725B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Given amount of rust on adjacent CMP riser, it may be appropriate to do a video inspection of this pipe. FIELD_STRUCT_DESC: 36-inch concrete encased pipe through levee 11.5 feet below crown. Pump in pump house on the landward side. Flap gate on the waterward end. Two concrete cutoff walls. Siphon breaker in 8-inch CMP riser unit on the landward slope (Permit No. 2725B, 1959). Included in the 1964 O&M manual. FS Date: 8/16/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_18703\_31243.jpg



8-inch CMP standpipe on LS slope with pumphouse in background.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.06	Rating **	M	Issue No.	942 (cont)	
LM End	1.06	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.934778 °		37.934778 °
				-121.330460 °		-121.330460 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:18703 DS_ID:20600 EP_NO: 2725B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Given amount of rust on adjacent CMP riser, it may be appropriate to do a video inspection of this pipe. FIELD_STRUCT_DESC: 36-inch concrete encased pipe through levee 11.5 feet below crown. Pump in pump house on the landward side. Flap gate on the waterward end. Two concrete cutoff walls. Siphon breaker in 8-inch CMP riser unit on the landward slope (Permit No. 2725B, 1959). Included in the 1964 O&M manual. FS Date: 8/16/2013						

Photo 2 of 2 : UCIP\_FA\_2016\_18703\_31242.jpg



Caution sign on WS shoulder for pipe crossings.

LM Start	1.07	Rating **	M	Issue No.	954
LM End	1.07	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.934750 °	37.934750 °
				-121.330405 °	-121.330405 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:17589 DS_ID:20601 EP_NO: 2725B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: CMP riser severely corroded. Good indicator of potential condition of 48-inch pipe. Recommend Video Inspection. FIELD_STRUCT_DESC: 48-inch CMP sewer line through the levee 16.0 feet below crown. Runs underneath the river and through levee with 36-inch CMP riser/inspection chamber on landward shoulder. Distribution/pumphouse on LS toe (Permit No. 2725B, 1959). Included in the 1964 O&M manual. FS Date: 8/16/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_17589\_29748.jpg



CMP riser for access/inspection on LS slope with distribution/pumphouse on LS toe.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.07	Rating **	M	Issue No.	954 (cont)	
LM End	1.07	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.934750 °		37.934750 °
				-121.330405 °		-121.330405 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:17589 DS_ID:20601 EP_NO: 2725B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: CMP riser severely corroded. Good indicator of potential condition of 48-inch pipe. Recommend Video Inspection. FIELD_STRUCT_DESC: 48-inch CMP sewer line through the levee 16.0 feet below crown. Runs underneath the river and through levee with 36-inch CMP riser/inspection chamber on landward shoulder. Distribution/pumphouse on LS toe (Permit No. 2725B, 1959). Included in the 1964 O&M manual. FS Date: 8/16/2013						

Photo 2 of 2 : UCIP\_FA\_2016\_17589\_29747.jpg



Caution sign on WS shoulder.

LM Start	1.08	Rating **	U	Issue No.	18
LM End	1.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.934645 °	37.934645 °
				-121.330310 °	-121.330310 °
DWR ID	DWR_RD0524_01_s_2012_18				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage extend from shoulder to middle of slope.					

Photo 1 of 7 : FA\_2016\_RD0524\_107\_18\_20160929\_00037.jpg



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

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	<b>1.08</b>	Rating **	U	Issue No.	<b>18 (cont)</b>
LM End	<b>1.08</b>	Issue Type +	Ma	Location *	LS

LM Start	<b>1.08</b>	Rating **	U	Issue No.	<b>18 (cont)</b>
LM End	<b>1.08</b>	Issue Type +	Ma	Location *	LS



A photograph showing a white vehicle, possibly a truck or SUV, parked on a gravel surface. The vehicle is partially visible on the left side of the frame. To the right of the vehicle is a steep, eroded embankment made of gravel and soil, with some sparse vegetation growing on it. The scene appears to be a construction or maintenance site.

* 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.08	Rating **	U	Issue No.	18 (cont)	
LM End	1.08	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.934645 °		37.934645 °
				-121.330310 °		-121.330310 °
DWR ID	DWR_RD0524_01_s_2012_18					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Slope damage extend from shoulder to middle of slope.						

LM Start	<b>1.08</b>	Rating **	U	Issue No.	<b>18 (cont)</b>
LM End	<b>1.08</b>	Issue Type +	Ma	Location *	LS

Photo 5 of 7 : FA\_2016\_RD0524\_107\_18\_20160929\_00041.jpg



Looking south at caving on landside shoulder. (Spring 2013)

Photo 6 of 7 : FA\_2016\_RD0524\_107\_18\_20160929\_00042.jpg



Looking at updated slope stability as of Fall 2013.

LM Start	<b>1.08</b>	Rating **	U	Issue No.	<b>18 (cont)</b>
LM End	<b>1.08</b>	Issue Type +	Ma	Location *	LS

Photo 7 of 7 : FA\_2016\_RD0524\_107\_18\_20160929\_00043.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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	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 waterward shoulder and slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_171\_20160929\_00213.jpg



Looking south at prunings on waterward shoulders.

LM Start	1.13	Rating **	C	Issue No.	175
LM End	1.13	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.934171 °	37.934171 °
				-121.329584 °	-121.329584 °
DWR ID	DWR_RD0524_01_f_2014_175				
Comment Code					
T4 : Trim trees over roadway to at least 12 feet above ground level.					
Inspector Comment					

No Photos

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\_2016\_RD0524\_107\_19\_20160929\_00044.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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.15	Rating **	U	Issue No.	60
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					

**Comment Code**

**Inspector Comment**

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. [2016 Site ID:RD0524U01RM41.79]

LM Start	<b>1.15</b>	Rating **	<b>U</b>	Issue No.	<b>60 (cont)</b>
LM End	<b>1.23</b>	Issue Type +	<b>Ma</b>	Location *	<b>WS</b>

Photo 1 of 3 : SJR2016\_RD0524U01RM41.79\_2.jpg



Direct view of the site.

Photo 2 of 3 : SJR2016\_RD0524U01RM41.79\_3.jpg



Close view of the erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.15	Rating **	U	Issue No.	60 (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						
Comment Code						
Inspector Comment						
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. [2016 Site ID:RD0524U01RM41.79]						

Photo 3 of 3 : SJR2016\_RD0524U01RM41.79\_4.jpg



Close view of the site. Note the tree near the erosion site.

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 landward toe and berm.					

Photo 1 of 4 : FA\_2016\_RD0524\_107\_915\_20161013\_00387.jpg



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

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	<b>1.16</b>	Rating **	U	Issue No.	<b>915 (cont)</b>
LM End	<b>1.23</b>	Issue Type +	Ma	Location *	LS

LM Start	<b>1.16</b>	Rating **	U	Issue No.	<b>915 (cont)</b>
LM End	<b>1.23</b>	Issue Type +	Ma	Location *	LS



Looking northwest at dense veg at landward toe and berm. (Spirng 2016)



Looking southwest at dense veg at landward toe and berm. (Spring 2015)



Looking southwest at dense veg. on landside toe. (Fall 2015)

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.17	Rating **	U	Issue No.	206
LM End	1.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.933591 °	37.933591 °
				-121.329154 °	-121.329154 °
DWR ID	DWR_RD0524_01_s_2016_206				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_206\_20160929\_00248.jpg



Looking southwest a untrimmed tree at landward toe. (Spring 2016)

LM Start	1.25	Rating **	U	Issue No.	263
LM End	1.25	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.932533 °	37.932533 °
				-121.328650 °	-121.328650 °
DWR ID	DWR_RD0524_01_s_2012_263				
Comment Code					
RA : Ramp					
Inspector Comment					
Unauthorized ramps on landside slope. Ramps were caused by vehicle traffic.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_263\_20160929\_00267.jpg



Looking northwest at unauthorized ramp on landside slope.

LM Start	<b>1.25</b>	Rating **	U	Issue No.	<b>263 (cont)</b>
LM End	<b>1.25</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_263\_20160929\_00268.jpg



Looking south at unauthorized ramp 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.29	Rating **	U	Issue No.	71
LM End	1.32	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931858 °	37.931858 °
				-121.328300 °	-121.328300 °
DWR ID					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM41.92]					

LM Start	<b>1.29</b>	Rating **	<b>U</b>	Issue No.	<b>71 (cont)</b>
LM End	<b>1.32</b>	Issue Type +	<b>Ma</b>	Location *	<b>WS</b>

Photo 1 of 3 : SJR2016\_RD0524U01RM41.92\_2.jpg



Front view of the erosion.

Photo 2 of 3 : SJR2016\_RD0524U01RM41.92\_3.jpg



Front view of the erosion.

LM Start	<b>1.29</b>	Rating **	<b>U</b>	Issue No.	<b>71 (cont)</b>
LM End	<b>1.32</b>	Issue Type +	<b>Ma</b>	Location *	<b>WS</b>

Photo 3 of 3 : SJR2016\_RD0524U01RM41.92\_4.jpg



Front view of the erosion. Note the drainage pipe on the site.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.29	Rating **	U	Issue No.	968
LM End	1.29	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.931977 °	37.931977 °
				-121.328401 °	-121.328401 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50747  
DS\_ID:20602  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 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 levee, 3.5 feet below 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 River O&M Unit No. 7, April 1964, (HLM 1.31)].  
FS Date: 11/16/2016

LM Start	<b>1.29</b>	Rating **	U	Issue No.	<b>968 (cont)</b>
LM End	<b>1.29</b>	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP\_FA\_2016\_50747\_29862.jpg



Pipe visible and open on WS slope.

Photo 2 of 2 : UCIP\_FA\_2016\_50747\_29861.jpg



Pipe open and visible on LS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.32	Rating **	M	Issue No.	130
LM End	1.36	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.931658 °	37.931085 °
				-121.328255 °	-121.328112 °
DWR ID	DWR_RD0524_01_s_2013_130				
Comment Code					
C3 : Add appropriate gravel or road base. Grade and compact.					
Inspector Comment					

No Photos

LM Start	1.36	Rating **	U	Issue No.	172
LM End	1.40	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.931085 °	37.930517 °
				-121.328112 °	-121.328072 °
DWR ID	DWR_RD0524_01_s_2015_172				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Levee crown depression several inches below original crown elevation. Section should be survey to determine proper elevation.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_172\_20160929\_00214.jpg



Looking east at depression on levee crown.

LM Start	<b>1.36</b>	Rating **	U	Issue No.	<b>172 (cont)</b>
LM End	<b>1.40</b>	Issue Type +	Ma	Location *	CR

Photo 2 of 2 : FA\_2016\_RD0524\_107\_172\_20160929\_00215.jpg



Looking southeast at depression on levee crown.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.39	Rating **	U	Issue No.	79
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					
Comment Code					
Inspector Comment					
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.					
[2016 Site ID:RD0524U01RM42.03]					

LM Start	<b>1.39</b>	Rating **	U	Issue No.	<b>79 (cont)</b>
LM End	<b>1.39</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SJR2016\_RD0524U01RM42.03\_2.jpg



Front view of the erosion.

Photo 2 of 3 : SJR2016\_RD0524U01RM42.03\_3.jpg



Close view of the erosion.

LM Start	<b>1.39</b>	Rating **	U	Issue No.	<b>79 (cont)</b>
LM End	<b>1.39</b>	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SJR2016\_RD0524U01RM42.03\_4.jpg



Close view of the erosion.

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

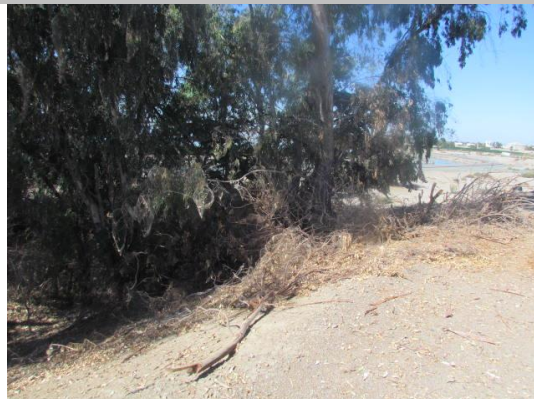
**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.49	Rating **	U	Issue No.	916 (cont)	
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 landward toe.						

Photo 2 of 4 : FA\_2016\_RD0524\_107\_916\_20160929\_00278.jpg



Looking at trees on landside slope. (Fall 2012)

LM Start	<b>1.49</b>	Rating **	U	Issue No.	<b>916 (cont)</b>
LM End	<b>1.49</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 4 : FA\_2016\_RD0524\_107\_916\_20160929\_00279.jpg



Looking at dense veg. on landside slope and toe.

LM Start	<b>1.49</b>	Rating **	U	Issue No.	<b>916 (cont)</b>
LM End	<b>1.49</b>	Issue Type +	Ma	Location *	LS

Photo 4 of 4 : FA\_2016\_RD0524\_107\_916\_20160929\_00280.jpg



Dense vegetation on landside toe.

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

USAA markers along alignment at gate.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.55	Rating **	U	Issue No.	23
LM End	1.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.928388 °	37.927797 °
				-121.328280 °	-121.327854 °
DWR ID	DWR_RD0524_01_s_2012_23				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation on landward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_23\_20161013\_00388.jpg



Looking southwest at dense veg on landward slope. (Fall 2016)

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			37.928372 °	37.928372 °
				-121.328283 °	-121.328283 °
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 waterward shoulder.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_202\_20161013\_00389.jpg



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

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

Photo 2 of 2 : FA\_2016\_RD0524\_107\_202\_20161013\_00390.jpg



Looking at hole on waterward shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.56	Rating **	U	Issue No.	90
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					

**Comment Code**

**Inspector Comment**

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. [2016 Site ID:RD0524U01RM42.2]

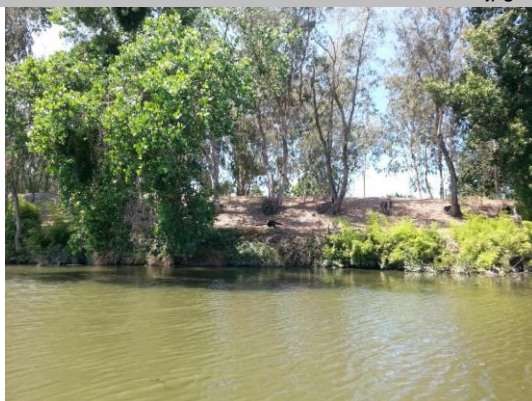
LM Start	<b>1.56</b>	Rating **	U	Issue No.	<b>90 (cont)</b>
LM End	<b>1.62</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SJR2016\_RD0524U01RM42.2\_1.jpg



Front view of the site where undermining has occurred.

Photo 2 of 3 : SJR2016\_RD0524U01RM42.2\_2.jpg



Close view of the erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.59	Rating **	M	Issue No.	136
LM End	1.59	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.927775 °	37.927775 °
				-121.327860 °	-121.327860 °
DWR ID	DWR_RD0524_01_s_2013_136				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Waterward shoulder caving.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_136\_20160929\_00203.jpg



Looking south at depression on levee crown near waterward shoulder.

LM Start	1.60	Rating **	U	Issue No.	24
LM End	1.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.927635 °	37.927540 °
				-121.327812 °	-121.327648 °
DWR ID	DWR_RD0524_01_s_2012_24				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Vegetation blocking landward toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_24\_20161013\_00394.jpg



Looking northwest at dense veg on waterward slope.

LM Start	1.60	Rating **	U	Issue No.	25
LM End	1.61	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.927635 °	37.927540 °
				-121.327812 °	-121.327648 °
DWR ID	DWR_RD0524_01_s_2012_25				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 3 : FA\_2016\_RD0524\_107\_25\_20161013\_00392.jpg



Looking northwest at dense veg on waterward 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.60	Rating **	U	Issue No.	25 (cont)
LM End	1.61	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.927635 °	37.927540 °
				-121.327812 °	-121.327648 °
DWR ID	DWR_RD0524_01_s_2012_25				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

LM Start	<b>1.60</b>	Rating **	U	Issue No.	<b>25 (cont)</b>
LM End	<b>1.61</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA\_2016\_RD0524\_107\_25\_20161013\_00393.jpg



Looking northwest at end of dense veg on waterward slope.

Photo 3 of 3 : FA\_2016\_RD0524\_107\_25\_20161013\_00391.jpg



Looking southwest at dense veg on waterward slope.

LM Start	1.62	Rating **	M	Issue No.	26
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 1 of 3 : FA\_2016\_RD0524\_107\_26\_20160929\_00059.jpg



Looking south at waterward 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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	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\_2016\_RD0524\_107\_26\_20160929\_00060.jpg



Looking east at waterward erosion.

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

Photo 3 of 3 : FA\_2016\_RD0524\_107\_26\_20160929\_00061.jpg



Looking east at waterward erosion and depression.

LM Start	1.64	Rating **	U	Issue No.	39
LM End	1.64	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927372 °	37.927372 °
				-121.327278 °	-121.327278 °
DWR ID	DWR_RD0524_01_s_2012_39				
Comment Code					
PO : Pole					
Inspector Comment					
Landowner constructed boat dock without permit.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_39\_20160929\_00081.jpg



Looking at garbage on waterside 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.64	Rating **	U	Issue No.	39 (cont)	
LM End	1.64	Issue Type +	En	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Encroachments			37.927372 °	37.927372 °	
				-121.327278 °	-121.327278 °	
DWR ID	DWR_RD0524_01_s_2012_39					
Comment Code						
PO : Pole						
Inspector Comment						
Landowner constructed boat dock without permit.						

Photo 2 of 2 : FA\_2016\_RD0524\_107\_39\_20160929\_00082.jpg



Looking east at non-permitted boat dock.

LM Start	1.65	Rating **	M	Issue No.	207
LM End	1.71	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927237 °	37.926621 °
				-121.327183 °	-121.326400 °
DWR ID	DWR_RD0524_01_s_2016_207				
Comment Code					
LI : Landscape Irrigation					
Inspector Comment					
Sprinklers on landward shoulder					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_207\_20160929\_00249.jpg



LM Start	<b>1.65</b>	Rating **	M	Issue No.	<b>207 (cont)</b>
LM End	<b>1.71</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_207\_20160929\_00250.jpg



Looking south at sprinkler line and sprinklers on landward shoulder.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

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

LM Start	1.67	Rating **	U	Issue No.	45
LM End	1.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927018 °	37.927018 °
				-121.326872 °	-121.326872 °
DWR ID	DWR_RD0524_01_s_2012_45				
Comment Code					
ST : Stairway					
Inspector Comment					
Stairs and retaining wall					

Photo 1 of 3 : FA\_2016\_RD0524\_107\_45\_20160929\_00089.jpg



Looking northeast at non-permitted concrete stairs on waterside slope.

LM Start	<b>1.67</b>	Rating **	U	Issue No.	<b>45 (cont)</b>
LM End	<b>1.67</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA\_2016\_RD0524\_107\_45\_20160929\_00090.jpg



Looking southwest at retaining wall connected to concrete stairs.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.67	Rating **	U	Issue No.	45 (cont)	
LM End	1.67	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			37.927018 °		37.927018 °
				-121.326872 °		-121.326872 °
DWR ID	DWR_RD0524_01_s_2012_45					
Comment Code						
ST : Stairway						
Inspector Comment						
Stairs and retaining wall						

Photo 3 of 3 : FA\_2016\_RD0524\_107\_45\_20160929\_00091.jpg



Looking west at concrete stairs on waterside slope.

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\_2016\_RD0524\_107\_27\_20160929\_00062.jpg



Looking south at landward slope depression.

LM Start	1.73	Rating **	U	Issue No.	28
LM End	1.73	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926322 °	37.926322 °
				-121.326115 °	-121.326115 °
DWR ID	DWR_RD0524_01_s_2012_28				
Comment Code					
GA : Garbage					
Inspector Comment					
Large pruning piles on landside slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_28\_20161013\_00395.jpg



Looking west at pruning and garbage piles at landward berm.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.75	Rating **	U	Issue No.	46
LM End	1.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926152 °	37.925993 °
				-121.325927 °	-121.325777 °
DWR ID	DWR_RD0524_01_s_2012_46				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Downed tree limbs on landward slope.					

LM Start	<b>1.75</b>	Rating **	U	Issue No.	<b>46 (cont)</b>
LM End	<b>1.76</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 4 : FA\_2016\_RD0524\_107\_46\_20160929\_00092.jpg



Looking south at tree limbs on landward slope.

Photo 2 of 4 : FA\_2016\_RD0524\_107\_46\_20160929\_00093.jpg



Looking southwest at tree limbs on landward slope.

LM Start	<b>1.75</b>	Rating **	U	Issue No.	<b>46 (cont)</b>
LM End	<b>1.76</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 4 : FA\_2016\_RD0524\_107\_46\_20160929\_00094.jpg



Looking south at tree limbs on landward slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.75	Rating **	U	Issue No.	46 (cont)	
LM End	1.76	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			37.926152 °		37.925993 °
				-121.325927 °		-121.325777 °
DWR ID	DWR_RD0524_01_s_2012_46					
Comment Code						
TR : Tree or limb						
Inspector Comment						
Downed tree limbs on landward slope.						

Photo 4 of 4 : FA\_2016\_RD0524\_107\_46\_20160929\_00095.jpg



Looking southwest at dense vegetation and low hanging tree branches on landside slope and toe.

LM Start	1.80	Rating **	M	Issue No.	957
LM End	1.80	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.925480 °	37.925480 °
				-121.325358 °	-121.325358 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21866					
DS_ID:24032					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: No permit identified for crossing.					
FIELD_STRUCT_DESC: 12-inch wrapped steel irrigation pipe through the levee at an unknown depth below the crown. Pump, butterfly valves, vent, and siphon breaker at concrete pad 50-feet off LS toe.					
Siphon breaker in 14-inch concrete standpipe on LS shoulder.					
FS Date: 8/20/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_21866\_37124.jpg



Pipe visible at lower left.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.80	Rating **	M	Issue No.	957 (cont)
LM End	1.80	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.925480 °	37.925480 °
				-121.325358 °	-121.325358 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:21866  
DS\_ID:24032  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: No permit identified for crossing.  
FIELD\_STRUCT\_DESC: 12-inch wrapped steel irrigation pipe through the levee at an unknown depth below the crown. Pump, butterfly valves, vent, and siphon breaker at concrete pad 50-feet off LS toe. Siphon breaker in 14-inch concrete standpipe on LS shoulder.  
FS Date: 8/20/2013

Photo 2 of 2 : UCIP\_FA\_2016\_21866\_37123.jpg



Pumping plant off LS toe.

LM Start	1.81	Rating **	M	Issue No.	953
LM End	1.81	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.925429 °	37.925429 °
				-121.325323 °	-121.325323 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:17847  
DS\_ID:20609  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: Pipe appears abandoned and if so should be done so properly.  
FIELD\_STRUCT\_DESC: 14-inch pipe through levee 20.0 feet below crown, 2 pumps and gate valves discharge into surge tank in pump house on the waterward slope. Concrete distribution box removed from the waterward slope. Abandoned 36-inch diameter concrete standpipe on LS toe next to service pole. Originally included in the 1964 O&M manual.  
FS Date: 8/20/2013

Photo 1 of 2 : UCIP\_FA\_2016\_17847\_29962.jpg



Pipes and pumphouse on WS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	<b>N : Not Inspected/Rated</b> C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 2 of 2 : UCIP\_FA\_2016\_17847\_29961.jpg

Steps to pump on WS slope.

Photo 1 of 2 : UCIP\_FA\_2016\_21865\_37121.jpg

Pipes visible on WS shoulder directly in front of pumphouse.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.81	Rating **	M	Issue No.	956 (cont)
LM End	1.81	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.925431 °	37.925431 °
				-121.325310 °	-121.325310 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21865 DS_ID:24033 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipes appear abandoned and should be removed from levee. FIELD_STRUCT_DESC: *ABANDONED* One 1-inch and two 3/4-inch PVC conduits through the levee 6-inches below the crown. FS Date: 8/20/2013					

Photo 2 of 2 : UCIP\_FA\_2016\_21865\_37120.jpg



Pipes visible on LS slope.

LM Start	1.90	Rating **	U	Issue No.	78
LM End	1.94	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.924364 °	37.923805 °
				-121.324473 °	-121.324238 °
DWR ID	DWR_RD0524_01_s_2012_78				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_78\_20160929\_00128.jpg



Looking southwest at landscaping on landside slope. (Spring 2012)

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.94	Rating **	C	Issue No.	104
LM End	1.94	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.923808 °	37.923808 °
				-121.324260 °	-121.324260 °
DWR ID	DWR_RD0524_01_s_2012_104				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Bamboo outside of the twenty foot vegetation zone.					

No Photos

LM Start	1.94	Rating **	U	Issue No.	176
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					
Landward caving (3 x 18" x 5 ) caused by broken sprinklers.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_176\_20160929\_00220.jpg



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

LM Start	<b>1.94</b>	Rating **	U	Issue No.	<b>176 (cont)</b>
LM End	<b>1.94</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_176\_20160929\_00221.jpg



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

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.99	Rating **	M	Issue No.	4
LM End	1.99	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.923068 °	37.923068 °
				-121.323990 °	-121.323990 °
DWR ID	DWR_RD0524_01_f_2012_4				
Comment Code					
ST : Stairway					
Inspector Comment					
Landowner installed rubber tires for a stairway on landside slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_4\_20160929\_00010.jpg



Looking west at rubber tires being used as stairs on landside slope.

LM Start	1.99	Rating **	M	Issue No.	958
LM End	1.99	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.923022 °	37.923022 °
				-121.323953 °	-121.323953 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21872 DS_ID:24035 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 3-inch PVC domestic non-potable water line through the levee at unknowd depth below the crown. Pump on concrete pad at WS toe. FS Date: 8/20/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_21872\_37128.jpg



Pump on concrete pad at WS slope.

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

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

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.99	Rating **	M	Issue No.	958 (cont)	
LM End	1.99	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.923022 °	37.923022 °	
				-121.323953 °	-121.323953 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:21872 DS_ID:24035 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 3-inch PVC domestic non-potable water line through the levee at unknowd depth below the crown. Pump on concrete pad at WS toe. FS Date: 8/20/2013						

Photo 2 of 2 : UCIP\_FA\_2016\_21872\_37127.jpg



PVC pipe visible on LS toe.

LM Start	1.99	Rating **	M	Issue No.	105
LM End	1.99	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.923032 °	37.923032 °
				-121.323933 °	-121.323933 °
DWR ID	DWR_RD0524_01_s_2012_105				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

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

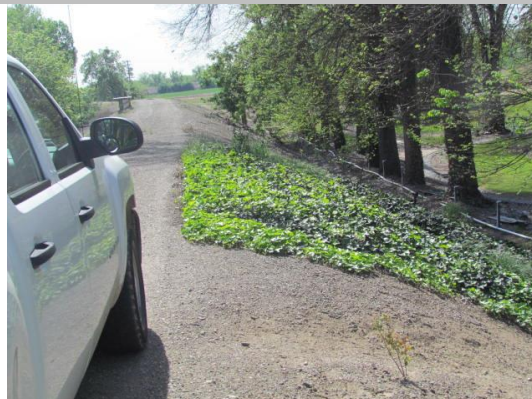
**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.00	Rating **	U	Issue No.	106
LM End	2.00	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.922923 °	37.922923 °
				-121.323837 °	-121.323837 °
DWR ID	DWR_RD0524_01_s_2012_106				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_106\_20160929\_00167.jpg



Looking southwest at ground cover on landward slope.

LM Start	2.01	Rating **	M	Issue No.	182
LM End	2.04	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.922837 °	37.922514 °
				-121.323785 °	-121.323504 °
DWR ID	DWR_RD0524_01_s_2014_182				
Comment Code					
DT : Ditch					
Inspector Comment					
Old irrigation ditch at the landward toe should be removed.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_182\_20160929\_00229.jpg



Looking northwest at an old irrigation ditch at landward toe.

LM Start	<b>2.01</b>	Rating **	M	Issue No.	<b>182 (cont)</b>
LM End	<b>2.04</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_182\_20160929\_00230.jpg



Looking southwest at an old irrigation ditch at landward toe.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.02	Rating **	U	Issue No.	6
LM End	2.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.922625 °	37.922062 °
				-121.323640 °	-121.323117 °
DWR ID	DWR_RD0524_01_f_2012_6				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation on waterward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_6\_20161013\_00396.jpg



Looking southeast at dense veg on waterward slope.

LM Start	2.03	Rating **	M	Issue No.	959
LM End	2.03	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922535 °	37.922535 °
				-121.323568 °	-121.323568 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21883 DS_ID:24036 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe abandoned and should be done so properly. Holes visible throughout exposed pipe. FIELD_STRUCT_DESC: 5-inch wrapped steel irrigation pipe through the levee 6-feet below the crown. No pump or other appurtances found. FS Date: 8/20/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_21883\_37134.jpg



Pipe visible on WS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.03	Rating **	M	Issue No.	959 (cont)
LM End	2.03	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922535 °	37.922535 °
				-121.323568 °	-121.323568 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21883 DS_ID:24036 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe abandoned and should be done so properly. Holes visible throughout exposed pipe. FIELD_STRUCT_DESC: 5-inch wrapped steel irrigation pipe through the levee 6-feet below the crown. No pump or other appurtances found. FS Date: 8/20/2013					

Photo 2 of 2 : UCIP\_FA\_2016\_21883\_37133.jpg



Holes in pipe along exposed side of pipe at WS slope.

LM Start	2.07	Rating **	M	Issue No.	960
LM End	2.07	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922080 °	37.922080 °
				-121.323118 °	-121.323118 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21895 DS_ID:24038 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 6-inch steel irrigation pipe through the levee at an unknown depth. Vent, meter, butterfly valve, and pump at pumphouse on WS slope. FS Date: 8/20/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_21895\_37142.jpg



Steel irrigation line visible in front of tank to right of powerpole off LS toe.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.07	Rating **	M	Issue No.	960 (cont)
LM End	2.07	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922080 °	37.922080 °
				-121.323118 °	-121.323118 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21895 DS_ID:24038 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 6-inch steel irrigation pipe through the levee at an unknown depth. Vent, meter, butterfly valve, and pump at pumphouse on WS slope. FS Date: 8/20/2013					

Photo 2 of 2 : UCIP\_FA\_2016\_21895\_37141.jpg



Irrigation line visible on side of pumphouse.

LM Start	2.07	Rating **	M	Issue No.	939
LM End	2.07	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922064 °	37.922064 °
				-121.323084 °	-121.323084 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:17944 DS_ID:20612 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Soil excavated from cover over pipe on WS next to concrete riser. May indicate a leak or other problem. FIELD_STRUCT_DESC: 20-inch steel pipe through the levee 15.0 feet below the crown. Pump in pump house on the waterward slope. Slide gate in 4-foot diameter concrete standpipe on WS slope with secondary concrete standpipe. PVC standpipe visible 350-feet off LS toe. Originally included in the 1964 O&M manual. FS Date: 8/20/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_17944\_30045.jpg



Slide gate in concrete riser with secondary concrete riser in foreground. Pumphouse in background.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.07	Rating **	M	Issue No.	939 (cont)
LM End	2.07	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922064 °	37.922064 °
				-121.323084 °	-121.323084 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:17944 DS_ID:20612 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Soil excavated from cover over pipe on WS next to concrete riser. May indicate a leak or other problem. FIELD_STRUCT_DESC: 20-inch steel pipe through the levee 15.0 feet below the crown. Pump in pump house on the waterward slope. Slide gate in 4-foot diameter concrete standpipe on WS slope with secondary concrete standpipe. PVC standpipe visible 350-feet off LS toe. Originally included in the 1964 O&M manual. FS Date: 8/20/2013					

Photo 2 of 2 : UCIP\_FA\_2016\_17944\_30044.jpg



Pump and pipe inside pumphouse.

LM Start	2.08	Rating **	C	Issue No.	183
LM End	2.08	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.922009 °	37.922009 °
				-121.323015 °	-121.323015 °
DWR ID	DWR_RD0524_01_s_2014_183				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Elderberry is outside the twenty foot zone on waterward slope.					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.15	Rating **	C	Issue No.	30
LM End	2.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.921383 °	37.921300 °
				-121.322043 °	-121.321902 °
DWR ID	DWR_RD0524_01_s_2012_30				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

No Photos

LM Start	2.19	Rating **	U	Issue No.	91
LM End	2.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920992 °	37.920992 °
				-121.321370 °	-121.321370 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
07/22/2014: The erosion has increased in size.					
08/13/2013: No significant change observed. Slightly more vegetation was visible.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2016 Site ID:RD0524U01RM42.79]					

Photo 1 of 2 : SJR2016\_RD0524U01RM42.79\_2.jpg



Close view of the pocket erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.19	Rating **	U	Issue No.	91 (cont)
LM End	2.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920992 °	37.920992 °
				-121.321370 °	-121.321370 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
07/22/2014: The erosion has increased in size.					
08/13/2013: No significant change observed. Slightly more vegetation was visible.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2016 Site ID:RD0524U01RM42.79]					

Photo 2 of 2 : SJR2016\_RD0524U01RM42.79\_4.jpg



Front view of the erosion.

LM Start	2.24	Rating **	U	Issue No.	99
LM End	2.27	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920650 °	37.920650 °
				-121.320370 °	-121.320370 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: An irrigation pipe is on site. [2016 Site					
ID:RD0524U01RM42.84]					

Photo 1 of 3 : SJR2016\_RD0524U01RM42.84\_1.jpg



Close view of the erosion.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	<b>2.24</b>	Rating **	U	Issue No.	<b>99 (cont)</b>
LM End	<b>2.27</b>	Issue Type +	Ma	Location *	WS

A photograph showing a rocky shoreline with sparse vegetation. A utility pole stands on the right side of the shore, with power lines extending across the frame. The foreground is filled with a body of water, likely a reservoir or lake, under a clear blue sky.

Close view of the erosion.

A photograph showing a riverbank. In the foreground, there is a body of water with ripples. The shoreline is composed of dark, rounded rocks. Above the rocks, the bank rises and is covered with sparse, dry vegetation and some green shrubs. A utility pole stands on the bank, with power lines extending across the top of the frame. The sky is clear and blue.

Close view of the erosion. Note the irrigation pipe next to the erosion.


Looking south at siphon on waterward slope.

* 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

## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 2 of 3 : FA\_2016\_RD0524\_107\_31\_20160929\_00066.jpg




Looking east at siphon on waterward slope.

Photo 3 of 3 : FA\_2016\_RD0524\_107\_31\_20160929\_00067.jpg



Looking south slope damage on waterward shoulder and slope.

Photo 1 of 2 : FA\_2016\_RD0524\_107\_32\_20160929\_00068.jpg



Looking northwest at dense veg on landward slope and toe fall 2015.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.27	Rating **	U	Issue No.	32 (cont)	
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 landward slope and toe.						

Photo 2 of 2 : FA\_2016\_RD0524\_107\_32\_20160929\_00069.jpg



Looking south at dense veg on landside slope and toe.

LM Start	2.27	Rating **	U	Issue No.	203
LM End	2.27	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.920327 °	37.920327 °
				-121.320175 °	-121.320175 °
DWR ID	DWR_RD0524_01_f_2016_203				
Comment Code					
PR : Prunings					
Inspector Comment					
Large pruning pile on landward slope and toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_203\_20161013\_00397.jpg



Looking west at pruning pile on waterward 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.31	Rating **	C	Issue No.	103
LM End	2.33	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.919885 °	37.919885 °
				-121.319710 °	-121.319710 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No sign of erosion observed at the repaired site.					
06/24/2015: No significant change observed.					
6/19/2014: The erosion was repaired.					
08/13/2013: The length of erosion has progressed downstream, and the site length has increased from 12 ft in length last year to 100 feet in length this year.					
08/07/2012: The site was first reported in the 2012 spring levee inspection report. The site is located at the inside corner of a river bend.					
[2016 Site ID:RD0524U01RM42.93]					

No Photos

LM Start	2.32	Rating **	M	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.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_34\_20160929\_00072.jpg



Looking northeast at damage to the slope possibly caused by human activity.

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

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

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.33	Rating **	U	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\_2016\_RD0524\_107\_107\_20160929\_00168.jpg



Looking northwest at untrimmed trees at landward toe.

LM Start	2.38	Rating **	U	Issue No.	204
LM End	2.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.919067 °	37.918713 °
				-121.319935 °	-121.320595 °
DWR ID	DWR_RD0524_01_f_2016_204				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation on landward slope and waterward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_204\_20161013\_00398.jpg



Looking south at dense veg on landward slope.

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		** 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	

## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 1 of 1 : FA\_2016\_R0524\_107\_35\_20160929\_00073.jpg



Looking southwest at dense vegetation on landward toe.

Photo 1 of 1 : FA\_2016\_RD0524\_107\_36\_20160929\_00074.jpg



Looking east at erosion on waterside slope.

Photo 1 of 1 : FA\_2016\_RD0524\_107\_80\_20161013\_00399.jpg



Looking south at untrimmed tree on landward slope.

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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	<b>2.49</b>	Rating **	U	Issue No.	<b>37 (cont)</b>
LM End	<b>2.50</b>	Issue Type +	Ma	Location *	LS

A gravel road leads through a landscape with trees and flowering bushes. The road is made of light-colored gravel and curves slightly to the right. On the left side of the road, there are large, leafy green trees. On the right side, there is a dense, low-lying bush with many small, bright yellow flowers. In the background, there is a clear blue sky and some distant hills or mountains. The overall scene is bright and sunny.

LM Start	<b>2.49</b>	Rating **	U	Issue No.	<b>37 (cont)</b>
LM End	<b>2.50</b>	Issue Type +	Ma	Location *	LS

A gravel road leads into a dense thicket of green trees and bushes under a blue sky with scattered clouds. The road is composed of light-colored gravel and dirt, curving slightly to the right. On the left side of the road, there is a pile of dry, broken branches and a small, white, L-shaped marker or post. The vegetation is lush and green, with various types of trees and shrubs. The sky is bright blue with a few white clouds. The overall scene suggests a rural or natural setting.

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

## Levee Inspection Report By Mile - Fall 2016


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 4 of 4 : FA\_2016\_RD0524\_107\_37\_20160929\_000078.jpg




Looking southwest at trees along levee landside toe.

Photo 1 of 2 : FA\_2016\_RD0524\_107\_38\_20160929\_00079.jpg



Looking north at elderberry on waterside slope.

Photo 2 of 2 : FA\_2016\_RD0524\_107\_38\_20160929\_00080.jpg



Looking south at elderberry on waterside slope.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

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					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_40\_20160929\_00083.jpg



Looking southwest at dense veg on landward slope.

LM Start	2.54	Rating **	U	Issue No.	82
LM End	2.54	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.917978 °	37.917978 °
				-121.322483 °	-121.322483 °
DWR ID	DWR_RD0524_01_s_2012_82				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Landward slope damage from animal digging into levee.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_82\_20161013\_00400.jpg



Looking southwest at large holes on landward slope. (Fall 2016)

LM Start	<b>2.54</b>	Rating **	U	Issue No.	<b>82 (cont)</b>
LM End	<b>2.54</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_82\_20160929\_00136.jpg



Looking southwest at damaged landward 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.56	Rating **	U	Issue No.	42
LM End	2.56	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917673 °	37.917673 °
				-121.322718 °	-121.322718 °
DWR ID	DWR_RD0524_01_s_2012_42				
Comment Code					
BU : Building					
Inspector Comment					
Animal pens on landward slope and toe.					

LM Start	<b>2.56</b>	Rating **	U	Issue No.	<b>42 (cont)</b>
LM End	<b>2.56</b>	Issue Type +	En	Location *	WS

Photo 1 of 2 : FA\_2016\_RD0524\_107\_42\_20160929\_00085.jpg



Looking west at animal pens on landside toe. (Fall 2012)

Photo 2 of 2 : FA\_2016\_RD0524\_107\_42\_20160929\_00086.jpg



Looking at animal pens on landside slope and toe.

LM Start	2.57	Rating **	M	Issue No.	12
LM End	2.57	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917538 °	37.917538 °
				-121.322757 °	-121.322757 °
DWR ID	DWR_RD0524_01_f_2012_12				
Comment Code					
PO : Pole					
Inspector Comment					
Old fence poles on landside shoulder and slope should be removed.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_12\_20160929\_00023.jpg



Looking northwest at fence poles on landside shoulder.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.57	Rating **	U	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 waterward shoulder and slope. Trench is 45 x 15 x 5.					

LM Start	<b>2.57</b>	Rating **	U	Issue No.	<b>218 (cont)</b>
LM End	<b>2.57</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA\_2016\_RD0524\_107\_218\_20161013\_00402.jpg



Looking east at trench on waterward shoulder.

Photo 2 of 3 : FA\_2016\_RD0524\_107\_218\_20161013\_00401.jpg



Looking south at trench on waterward shoulder.

LM Start	<b>2.57</b>	Rating **	U	Issue No.	<b>218 (cont)</b>
LM End	<b>2.57</b>	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA\_2016\_RD0524\_107\_218\_20161013\_00403.jpg



Looking northwest at trench on waterward shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.58	Rating **	M	Issue No.	917	
LM End	2.58	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.917475 °		37.917475 °
				-121.322808 °		-121.322808 °
DWR ID	DWR_RD0524_01_s_2012_917					
Comment Code						
A2 : Repair the levee slope damaged by livestock and prevent large animal access.						
Inspector Comment						

No Photos

LM Start	2.58	Rating **	M	Issue No.	7
LM End	2.58	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917431 °	37.917431 °
				-121.322780 °	-121.322780 °
DWR ID	DWR_RD0524_01_f_2012_7				
Comment Code					
RA : Ramp					
Inspector Comment					
Ramp due to land owner traffic.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_7\_20160929\_00013.jpg



Looking southeast at unauthorized ramp on waterside 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.58	Rating **	M	Issue No.	961
LM End	2.58	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.917365 °	37.917365 °
				-121.322779 °	-121.322779 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:21935  
DS\_ID:24040  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: Need to determine type of abandonment for pipe at this location.  
FIELD\_STRUCT\_DESC: \*ABANDONED\* Pump pad on LS shoulder with 4'X9' brick distribution box on WS slope. No pipe visible. 4'X9' brick distribution box on LS toe.  
FS Date: 8/20/2013

LM Start	<b>2.58</b>	Rating **	M	Issue No.	<b>961 (cont)</b>
LM End	<b>2.58</b>	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP\_FA\_2016\_21935\_37162.jpg



Foundation for pump with distribution box on WS shoulder.

Photo 2 of 2 : UCIP\_FA\_2016\_21935\_37161.jpg



Distribution box on LS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 1 of 1 : FA\_2016\_RD0524\_107\_9\_20160929\_00014.jpg



Looking southwest at dense veg at landward toe.

Photo 1 of 1 : FA\_2016\_RD0524\_107\_185\_20160929\_00231.jpg



Looking northwest at untrimmed trees on landward slope and toe.

Photo 1 of 1 : FA\_2016\_RD0524\_107\_43\_20160929\_00087.jpg



Looking southeast at dense veg on landward slope and toe fall 2015.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.65	Rating **	U	Issue No.	918
LM End	2.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.916718 °	37.916502 °
				-121.322020 °	-121.321980 °
DWR ID	DWR_RD0524_01_s_2012_918				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landward slope and toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_918\_20161013\_00404.jpg



Looking south at untrimmed trees on landward slope.

LM Start	2.65	Rating **	U	Issue No.	920
LM End	2.65	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.916698 °	37.916698 °
				-121.322007 °	-121.322007 °
DWR ID	DWR_RD0524_01_s_2012_920				
Comment Code					
RA : Ramp					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_920\_20160929\_00281.jpg



Looking southeast at unauthorized ramp on waterside slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.65	Rating **	C	Issue No.	122
LM End	2.65	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.916650 °	37.916650 °
				-121.321980 °	-121.321980 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No sign of erosion observed at the repaired site.					
06/24/2015: No significant change observed.					
06/19/2014: The erosion was repaired.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2016 Site ID:RD0524U01RM43.23]					

No Photos

LM Start	2.67	Rating **	M	Issue No.	44
LM End	2.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.916418 °	37.915142 °
				-121.321963 °	-121.323018 °
DWR ID	DWR_RD0524_01_s_2012_44				
Comment Code					
T4 : Trim trees over roadway to at least 12 feet above ground level.					
Inspector Comment					
Trim over hanging trees at least 12 feet above ground level.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_44\_20160929\_00088.jpg



Looking north at dense trees overhanging levee crown.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.70	Rating **	U	Issue No.	264
LM End	2.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.915968 °	37.915557 °
				-121.322275 °	-121.322607 °
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 landward slope and toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_264\_20161013\_00405.jpg



Looking south at untrimmed trees on landward slope.

LM Start	2.73	Rating **	M	Issue No.	940
LM End	2.73	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.915698 °	37.915698 °
				-121.322501 °	-121.322501 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18085 DS_ID:20616 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for crossing. Unknoww use. Pipe should be removed. FIELD_STRUCT_DESC: 3-inch galvanized iron pipe through the levee 0.3 feet below the crown. Valve on the landward shoulder. FS Date: 8/20/2013 3:28:19 PM					

Photo 1 of 2 : UCIP\_FA\_2016\_18085\_30191.jpg



Pipe and vent visible on LS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.73	Rating **	M	Issue No.	940 (cont)
LM End	2.73	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.915698 °	37.915698 °
				-121.322501 °	-121.322501 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18085 DS_ID:20616 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for crossing. Unknoww use. Pipe should be removed. FIELD_STRUCT_DESC: 3-inch galvanized iron pipe through the levee 0.3 feet below the crown. Valve on the landward shoulder. FS Date: 8/20/2013 3:28:19 PM					

Photo 2 of 2 : UCIP\_FA\_2016\_18085\_30190.jpg



Pipe visible on WS slope.

LM Start	2.74	Rating **	M	Issue No.	41
LM End	2.74	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915556 °	37.915556 °
				-121.322616 °	-121.322616 °
DWR ID	DWR_RD0524_01_s_2016_41				
Comment Code					
EQ : Equipment					
Inspector Comment					
Landowner installed satellite dish on waterward shoulder.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_41\_20160929\_00084.jpg



Looking north at satellite dish on waterward shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.74	Rating **	C	Issue No.	70
LM End	2.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915503 °	37.915503 °
				-121.322745 °	-121.322745 °
DWR ID	DWR_RD0524_01_s_2012_70				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Broken tree branch removed.					

No Photos

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 landward slope.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_219\_20161013\_00406.jpg



Looking south at several rodent holes on landward slope.

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

Photo 2 of 2 : FA\_2016\_RD0524\_107\_219\_20161013\_00407.jpg



Looking at typical rodent hole on waterward slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.82	Rating **	U	Issue No.	220
LM End	2.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.914893 °	37.914258 °
				-121.323770 °	-121.324328 °
DWR ID	DWR_RD0524_01_f_2016_220				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Dense vegetation on waterward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_220\_20161013\_00408.jpg



Looking at dense veg on waterward slope.

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					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_49\_20160929\_00100.jpg



Looking northwest at elderberry on landside slope.

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 landward slope and toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_209\_20160929\_00252.jpg



Looking northwest at untrimmed tree at landward toe.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

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 °	37.913503 °
				-121.324427 °	-121.324488 °
DWR ID	DWR_RD0524_01_s_2012_50				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_50\_20160929\_00101.jpg



Looking southwest at prunings on landside slope.

LM Start	2.93	Rating **	U	Issue No.	51
LM End	2.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.913415 °	37.913415 °
				-121.324503 °	-121.324503 °
DWR ID	DWR_RD0524_01_s_2012_51				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landward slope and toe.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_51\_20160929\_00102.jpg



Looking south at dense trees on landward slope fall 2015

LM Start	<b>2.93</b>	Rating **	U	Issue No.	<b>51 (cont)</b>
LM End	<b>2.93</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_51\_20160929\_00103.jpg



Looking south at dense trees on landward slope spring 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.94	Rating **	M	Issue No.	210
LM End	2.94	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.913198 °	37.913198 °
				-121.324490 °	-121.324490 °
DWR ID	DWR_RD0524_01_s_2016_210				
Comment Code					
GA : Garbage					
Inspector Comment					
Old containers at landward toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_210\_20160929\_00253.jpg



Looking west at abandoned containers at landward toe.

LM Start	2.95	Rating **	M	Issue No.	941
LM End	2.95	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.913101 °	37.913101 °
				-121.324500 °	-121.324500 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18089 DS_ID:20617 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Review crossing with inspector as records indicate that this should be an 8-inch pipe through levee 3.0 feet below crown, pump on landward side. Siphon breaker on the waterward slope. Originally included in the 1964 O&M manual. FIELD_STRUCT_DESC: 16-inch wrapped steel storm discharge pipe through the levee 1.5-feet below the crown. Pump on steel pile structure at drainage canal off LS toe. FS Date: 8/20/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_18089\_30198.jpg



PVC wrapped pipe and siphon breaker visible on WS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.95	Rating **	M	Issue No.	941 (cont)	
LM End	2.95	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.913101 °		37.913101 °
				-121.324500 °		-121.324500 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:18089 DS_ID:20617 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Review crossing with inspector as records indicate that this should be an 8-inch pipe through levee 3.0 feet below crown, pump on landward side. Siphon breaker on the waterward slope. Originally included in the 1964 O&M manual. FIELD_STRUCT_DESC: 16-inch wrapped steel storm discharge pipe through the levee 1.5-feet below the crown. Pump on steel pile structure at drainage canal off LS toe. FS Date: 8/20/2013						

Photo 2 of 2 : UCIP\_FA\_2016\_18089\_30197.jpg



Pipe, pump, power pole, and meter visible off LS toe.

LM Start	2.96	Rating **	U	Issue No.	126
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					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM43.52]					

Photo 1 of 2 : SJR2016\_RD0524U01RM43.52\_1.jpg



Upstream view of the erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.96	Rating **	U	Issue No.	126 (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					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM43.52]					

Photo 2 of 2 : SJR2016\_RD0524U01RM43.52\_4.jpg



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

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					
A2 : Repair the levee slope damaged by livestock and prevent large animal access.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

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

A photograph showing a dark, circular opening in a sandy, rocky terrain, likely a burrow or nest entrance. The surrounding ground is composed of light-colored sand and small, dark rocks. The opening is slightly recessed into the ground.

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

A photograph of a sandy, rocky slope. The ground is composed of light-colored sand and numerous small, dark grey rocks of various sizes. Several small, dark, circular holes are visible in the sand, which are likely burrows of pocket mice. The slope is relatively steep, and there are some small patches of green grass or vegetation at the top edge.

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

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

A photograph showing a large pile of discarded black tires in the foreground, next to a large mound of orange-brown soil or sand. In the background, there are several large, light-colored industrial buildings under a clear blue sky. The ground is dry and dusty.

Looking west at rubber tires at landward toe.

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.11	Rating **	M	Issue No.	212
LM End	3.27	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.910876 °	37.908558 °
				-121.325181 °	-121.325394 °
DWR ID	DWR_RD0524_01_s_2016_212				
Comment Code					
DT : Ditch					
Inspector Comment					
Shallow drainage ditch at landward toe.					

LM Start	<b>3.11</b>	Rating **	M	Issue No.	<b>212 (cont)</b>
LM End	<b>3.27</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : FA\_2016\_RD0524\_107\_212\_20160929\_00255.jpg



Looking northwest at southend of ditch at landward toe.

Photo 2 of 2 : FA\_2016\_RD0524\_107\_212\_20160929\_00256.jpg



Looking southwest at northend of ditch at landward toe.

LM Start	3.18	Rating **	U	Issue No.	211
LM End	3.18	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.909945 °	37.909945 °
				-121.325543 °	-121.325543 °
DWR ID	DWR_RD0524_01_s_2016_211				
Comment Code					
RA : Ramp					
Inspector Comment					
Unauthorized ramp on landward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_211\_20160929\_00254.jpg



Looking northwest at unauthorized ramp 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.23	Rating **	C	Issue No.	128
LM End	3.31	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.908544 °	37.908544 °
				-121.324894 °	-121.324894 °
DWR ID					
Comment Code					
Inspector Comment					
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 erosion was found at the levee toe. Trees are present.					
08/07/2012: The site has been repaired. Protecting riprap revetment has been placed at the levee shoulder and slope, but minor erosions are visible at the levee toe.					
08/23/2011: Sloughing rip rap is visible on the site [2016 Site ID:RD0524U01RM43.83]					

No Photos

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

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.30	Rating **	U	Issue No.	129
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					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM43.86]					

Photo 1 of 1 : SJR2016\_RD0524U01RM43.86\_3.jpg



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

LM Start	3.30	Rating **	U	Issue No.	926
LM End	3.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908158 °	37.907080 °
				-121.325418 °	-121.325366 °
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\_2016\_RD0524\_107\_926\_20160929\_00284.jpg



Looking southwest at dense veg on landward slope.

LM Start	<b>3.30</b>	Rating **	U	Issue No.	<b>926 (cont)</b>
LM End	<b>3.38</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_926\_20160929\_00285.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                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.35	Rating **	U	Issue No.	969
LM End	3.35	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.907504 °	37.907504 °
				-121.325420 °	-121.325420 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50748  
DS\_ID:20618  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 same as previous inspection erosion is still present on LS toe and slope. (O. Magana - DWR UCIP) 08/20/2013 Extensive erosion on LS toe at distribution box due to failure of box/pipe connection. Erosion on LS slope due to recently repaired leak at gate valve. (W. Wylie - DWR UCIP)  
FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe (O&M reference list 12-inch pipe) through the levee, 7 feet below the crown. Pump house is located on the waterside (WS) slope. Gate valve is located on the landside (LS) slope. A 4-foot by 4-foot brick distribution box built in 1918 is located on the LS toe. This site was used to manufacture brick back in 1918 and some of the appurtenances that remain are still in use (distribution box and ditch). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin River O&M Unit 7, April 1964, (HLM 3.38). conversation with owner 2016].  
FS Date: 11/16/2016

LM Start	<b>3.35</b>	Rating **	U	Issue No.	<b>969 (cont)</b>
LM End	<b>3.35</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_FA\_2016\_50748\_30206.jpg



Pipe and pumphouse on WS slope.

Photo 2 of 2 : UCIP\_FA\_2016\_50748\_30205.jpg



Pipe, gatevalve, and erosion on LS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.36	Rating **	M	Issue No.	53
LM End	3.42	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.907283 °	37.906503 °
				-121.325432 °	-121.325002 °
DWR ID	DWR_RD0524_01_s_2012_53				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

LM Start	3.42	Rating **	C	Issue No.	56					
LM End	3.42	Issue Type +	Ma	Location *	LS					
Category	Earthen Levee			GPS Latitude/Longitude						
				Start	End					
Item	Encroachments			37.906540 °	37.906540 °					
				-121.325015 °	-121.325015 °					
DWR ID	DWR_RD0524_01_s_2012_56									
Comment Code										
MA : Material										
Inspector Comment										
Landowner removed broken concrete pipes from landward slope.										

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 landward slope.										

A photograph showing a gravelly or sandy slope in the foreground. Several clumps of plants with long, narrow, spiky leaves are growing on the slope. Some of these plants have tall, thin, brownish seed heads or flower stalks rising from them. In the background, there is a dense wall of green trees and shrubs. The sky is visible at the top right, appearing clear and blue. The overall scene suggests a natural or semi-natural landscape, possibly a coastal or dune area.

Looking northwest at dense vegetation on landside slope.

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

# Reclamation District No. 0524 Middle Roberts Island

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.56	Rating **	C	Issue No.	131
LM End	3.58	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.904630 °	37.904630 °
				-121.323610 °	-121.323610 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed. The erosion at the levee toe discovered last year is still visible.					
06/24/2015: No significant change observed.					
06/19/2014: The previous erosion was repaired. New erosion was found below the repaired levee slope.					
08/13/2013: No significant change observed.					
08/07/2012: The levee toe has been cut off along a 150 ft. long river stretch. The erosion is located just upstream of a river bend. [2016 Site ID:RD0524U01RM44.13]					

No Photos

LM Start	3.61	Rating **	M	Issue No.	124
LM End	3.61	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.904375 °	37.904375 °
				-121.324615 °	-121.324615 °
DWR ID	DWR_RD0524_01_f_2012_124				
Comment Code					
V6 : Landscaping					
Inspector Comment					
Landowner planted cactus on landside toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_124\_20160929\_00187.jpg



Looking west at cactus on landside toe.

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

No Photos

Looking southeast steps cut into waterside slope.

Looking southwest at century plant at landward toe fall 2015.

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**Flood Control Project Maintenance  
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**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.67	Rating **	U	Issue No.	192
LM End	3.67	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.903782 °	37.903782 °
				-121.325363 °	-121.325363 °
DWR ID	DWR_RD0524_01_s_2015_192				
Comment Code					
PR : Prunings					
Inspector Comment					
Large pruning piles at landward toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_192\_20161013\_00417.jpg



Looking west at pruning pile at landward toe.

LM Start	3.69	Rating **	U	Issue No.	194
LM End	3.78	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.903553 °	37.902505 °
				-121.325468 °	-121.326425 °
DWR ID	DWR_RD0524_01_s_2015_194				
Comment Code					
DT : Ditch					
Inspector Comment					
Shallow Irrigation ditch at landward toe.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_194\_20160929\_00236.jpg



Looking south at irrigation ditch at landward toe.

LM Start	<b>3.69</b>	Rating **	U	Issue No.	<b>194 (cont)</b>
LM End	<b>3.78</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_194\_20160929\_00237.jpg



Looking east at south end of irrigation ditch at landward 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



# Reclamation District No. 0524 Middle Roberts Island



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.79	Rating **	M	Issue No.	963
LM End	3.79	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.902371 °	37.902371 °
				-121.326440 °	-121.326440 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:22725  
DS\_ID:24044  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: No permit identified for this crossing.  
FIELD\_STRUCT\_DESC: 8-inch steel irrigation pipe through the levee 0-feet below the crown. Pipe integrated into steel cattelguard style crossing. Slant pump and butterfly valve at concrete foundation on WS slope. Filter plant, vents, and butterfly valves on LS toe.  
FS Date: 8/20/2013

LM Start	<b>3.79</b>	Rating **	M	Issue No.	<b>963 (cont)</b>
LM End	<b>3.79</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_FA\_2016\_22725\_38445.jpg



Pump and butterfly valve on concrete pad on WS shoulder.

Photo 2 of 2 : UCIP\_FA\_2016\_22725\_38444.jpg



Vent on PVC pipe at WS shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.79	Rating **	M	Issue No.	936
LM End	3.79	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.902361 °	37.902361 °
				-121.326443 °	-121.326443 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18307 DS_ID:20620 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. Evidence of severe internal corrosion in concrete distribution box at LS toe. FIELD_STRUCT_DESC: 12-inch concrete encased pipe through the levee 10.5 feet below the crown, pump and gate valve in pump house on the waterward slope. 6'X6' Concrete distribution box on the landward toe. Two concrete cutoff walls. Service pole at the landward toe. Originally included in the 1964 O&M manual. FS Date: 8/20/2013					

LM Start	<b>3.79</b>	Rating **	M	Issue No.	<b>936 (cont)</b>
LM End	<b>3.79</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_FA\_2016\_18307\_30528.jpg



Slant pump visible at concrete foundation on WS slope. Pumphouse removed.

Photo 2 of 2 : UCIP\_FA\_2016\_18307\_30527.jpg



Slant pump and pipe on WS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

No Photos

Photo 1 of 1 : FA\_2016\_RD0524\_107\_928\_20160929\_00287.jpg



Looking south at dense vegetation on landward slope and toe.

Photo 1 of 3 : FA\_2016\_RD0524\_107\_92\_20160929\_00148.jpg



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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.82	Rating **	U	Issue No.	92 (cont)	
LM End	3.82	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			37.901912 °		37.901912 °
				-121.326533 °		-121.326533 °
DWR ID	DWR_RD0524_01_s_2016_92					
Comment Code						
RW : Retaining Wall						
Inspector Comment						
Unauthorized retaining wall, sprinklers, and steps on landward slope.						

Photo 2 of 3 : FA\_2016\_RD0524\_107\_92\_20160929\_00149.jpg



LM Start	<b>3.82</b>	Rating **	U	Issue No.	<b>92 (cont)</b>
LM End	<b>3.82</b>	Issue Type +	En	Location *	LS

Photo 3 of 3 : FA\_2016\_RD0524\_107\_92\_20160929\_00150.jpg



Looking east at stone steps on landward slope.

LM Start	3.85	Rating **	C	Issue No.	187
LM End	3.85	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.901447 °	37.901447 °
				-121.326500 °	-121.326500 °
DWR ID	DWR_RD0524_01_s_2014_187				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Tree limb on waterward shoulder.					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.87	Rating **	U	Issue No.	95
LM End	3.90	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.901147 °	37.900735 °
				-121.326453 °	-121.326425 °
DWR ID	DWR_RD0524_01_f_2013_95				
Comment Code					
EQ : Equipment					
Inspector Comment					
Landowner is storing equipment on landward shoulder and landward toe.					

LM Start	<b>3.87</b>	Rating **	U	Issue No.	<b>95 (cont)</b>
LM End	<b>3.90</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : FA\_2016\_RD0524\_107\_95\_20160929\_00153.jpg



Looking south at farm equipment stored on landward shoulder and toe.

Photo 2 of 3 : FA\_2016\_RD0524\_107\_95\_20160929\_00154.jpg



Looking north at farm equipment stored on landward shoulder.

LM Start	<b>3.87</b>	Rating **	U	Issue No.	<b>95 (cont)</b>
LM End	<b>3.90</b>	Issue Type +	En	Location *	LS

Photo 3 of 3 : FA\_2016\_RD0524\_107\_95\_20160929\_00155.jpg



Looking west at farm equipment stored at landward 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

# Reclamation District No. 0524 Middle Roberts Island



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.90	Rating **	M	Issue No.	966
LM End	3.90	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.900778 °	37.900778 °
				-121.326420 °	-121.326420 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:41464  
DS\_ID:20621  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: Appears to be abandoned as signage has been removed.  
FIELD\_STRUCT\_DESC: 2.5-inch submarine telephone conduit through levee and across channel 2.0 feet below crown. Sign posts remain on both sides of river on the waterward slope.  
FS Date: 8/20/2013

LM Start	<b>3.90</b>	Rating **	M	Issue No.	<b>966 (cont)</b>
LM End	<b>3.90</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_FA\_2016\_41464\_30543.jpg



Sign posts with sign removed on WS slope.

Photo 2 of 2 : UCIP\_FA\_2016\_41464\_30542.jpg



Sign posts visible on opposite river bank in same condition.

**\* 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

# Reclamation District No. 0524 Middle Roberts Island

* 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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	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\_2016\_RD0524\_107\_61\_20160929\_00112.jpg



Looking east at untrimmed tree at landward toe.

LM Start	4.04	Rating **	M	Issue No.	937
LM End	4.04	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.898853 °	37.898853 °
				-121.327049 °	-121.327049 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18314 DS_ID:20623 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: 8-inch concrete encased pipe through the levee 9.5-feet below crown, pump and gate valve in pump house on the waterward slope. Slide gate in 42-inch corrugated metal pipe riser on the waterward slope. Brick standpipe at the toe of the landward slope. 1.5-inch galvanized iron electrical conduit through the levee 3-feet below the crown at the same location. Originally included in the 1964 O&M manual. FS Date: 8/20/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_18314\_30559.jpg



Electrical conduit visible on WS slope at pumphouse.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.04	Rating **	M	Issue No.	937 (cont)	
LM End	4.04	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.898853 °	37.898853 °	
				-121.327049 °	-121.327049 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:18314 DS_ID:20623 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: 8-inch concrete encased pipe through the levee 9.5-feet below crown, pump and gate valve in pump house on the waterward slope. Slide gate in 42-inch corrugated metal pipe riser on the waterward slope. Brick standpipe at the toe of the landward slope. 1.5-inch galvanized iron electrical conduit through the levee 3-feet below the crown at the same location. Originally included in the 1964 O&M manual. FS Date: 8/20/2013						



Pumphouse and gate valve in CMP riser on WS slope.

LM Start	4.04	Rating **	C	Issue No.	64
LM End	4.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.898832 °	37.898090 °
				-121.327092 °	-121.327457 °
DWR ID	DWR_RD0524_01_s_2012_64				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.05	Rating **	C	Issue No.	62
LM End	4.05	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.898717 °	37.898717 °
				-121.327138 °	-121.327138 °
DWR ID	DWR_RD0524_01_f_2015_62				
Comment Code					
PR : Prunings					
Inspector Comment					
Pruning pile at landward toe.					

No Photos

LM Start	4.10	Rating **	U	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 °	°
				-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'.					

Photo 1 of 3 : FA\_2016\_RD0524\_107\_108\_20160929\_00169.jpg



Looking north at caving slope on landside of levee.

LM Start	<b>4.10</b>	Rating **	U	Issue No.	<b>108 (cont)</b>
LM End	<b>4.15</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA\_2016\_RD0524\_107\_108\_20160929\_00170.jpg



Looking south at damage slope on landside of levee.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.10	Rating **	U	Issue No.	108 (cont)	
LM End	4.15	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.898035 °		°
				-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'.						

Photo 3 of 3 : FA\_2016\_RD0524\_107\_108\_20160929\_00171.jpg



Looking southwest at caving slope on landside of levee. (Spring 2014)

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 landward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_213\_20160929\_00257.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**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.16	Rating **	M	Issue No.	938
LM End	4.16	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.897118 °	37.897118 °
				-121.327910 °	-121.327910 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18318					
DS_ID:20625					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Small leak on WS slope causing minor erosion on WS slope.					
FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee 4.5 feet below the crown, pumphouse and gate valve on the waterward slope. 36-inch concrete standpipe, power pole, and meter on LS toe.					
Originally included in the 1964 O&M manual.					
FS Date: 8/23/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_18318\_30589.jpg



Concrete standpipe on LS slope.

LM Start	<b>4.16</b>	Rating **	M	Issue No.	<b>938 (cont)</b>
LM End	<b>4.16</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP\_FA\_2016\_18318\_30588.jpg



Vent or siphon breaker just off LS shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.16	Rating **	M	Issue No.	110
LM End	4.16	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.897103 °	37.897103 °
				-121.327895 °	-121.327895 °
DWR ID	DWR_RD0524_01_s_2012_110				
Comment Code					
RA : Ramp					
Inspector Comment					
Two unauthorized ramps on landward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_110\_20160929\_00172.jpg



Looking southwest at an unauthorized ramp on landside slope.

LM Start	4.17	Rating **	M	Issue No.	947
LM End	4.17	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.897074 °	37.897074 °
				-121.327926 °	-121.327926 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:22069 DS_ID:24049 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 2.25-inch PVC domestic water service through the levee 5-feet below the crown. Pump and tank on WS slope with a vent on the LS slope. FS Date: 8/23/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_22069\_37660.jpg



Pipe visible on LS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.17	Rating **	M	Issue No.	947 (cont)
LM End	4.17	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.897074 °	37.897074 °
				-121.327926 °	-121.327926 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:22069 DS_ID:24049 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 2.25-inch PVC domestic water service through the levee 5-feet below the crown. Pump and tank on WS slope with a vent on the LS slope. FS Date: 8/23/2013					

Photo 2 of 2 : UCIP\_FA\_2016\_22069\_37659.jpg



Pipe, pump, and tank visible on WS slope.

LM Start	4.36	Rating **	C	Issue No.	65
LM End	4.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.894587 °	37.892493 °
				-121.329253 °	-121.328267 °
DWR ID	DWR_RD0524_01_s_2012_65				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.37	Rating **	M	Issue No.	934
LM End	4.37	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.894453 °	37.894453 °
				-121.329232 °	-121.329232 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18320					
DS_ID:20626					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Small leak in pipe on LS slope and pipe slightly crushed on LS toe.					
FIELD_STRUCT_DESC: 9-inch steel stormdrain pipe through the levee 3.0 feet below the crown, pump in drain ditch on the landward side.					
Siphon breaker on the waterward slope. Originally included in the 1964 O&M manual.					
FS Date: 8/23/2013					

LM Start	<b>4.37</b>	Rating **	M	Issue No.	<b>934 (cont)</b>
LM End	<b>4.37</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_FA\_2016\_18320\_30594.jpg



Pipe and siphon breaker on WS slope.

Photo 2 of 2 : UCIP\_FA\_2016\_18320\_30593.jpg



Small leak in pipe on LS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.38	Rating **	M	Issue No.	111
LM End	4.38	Issue Type +	En	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\_2016\_RD0524\_107\_111\_20160929\_00173.jpg



Looking west at dead tree at landside toe.

LM Start	4.40	Rating **	U	Issue No.	112
LM End	4.53	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.893928 °	37.892230 °
				-121.329203 °	-121.328187 °
DWR ID	DWR_RD0524_01_s_2012_112				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees along landward slope and toe.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_112\_20160929\_00174.jpg



Looking southeast at untrimmed tree at landward toe.

LM Start	<b>4.40</b>	Rating **	U	Issue No.	<b>112 (cont)</b>
LM End	<b>4.53</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA\_2016\_RD0524\_107\_112\_20160929\_00175.jpg



Looking northeast at untrimmed tree on landward slope and 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



# Reclamation District No. 0524 Middle Roberts Island



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.53	Rating **	U	Issue No.	132
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					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM45.07]					

LM Start	<b>4.53</b>	Rating **	U	Issue No.	<b>132 (cont)</b>
LM End	<b>4.54</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016\_RD0524U01RM45.07\_3.jpg



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

Photo 2 of 2 : SJR2016\_RD0524U01RM45.07\_4.jpg



Upstream view of the erosion.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.68	Rating **	M	Issue No.	935
LM End	4.68	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.890313 °	37.890313 °
				-121.329405 °	-121.329405 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18323 DS_ID:20646 EP_NO: 0 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Good candidate for video inspection as brick and mortar deteriorating inside tunnel. FIELD_STRUCT_DESC: 22-inch concrete pipe through the levee 12.0 feet below the crown. Pump on pier at WS toe. 16-inch pipe from pump discharges into a concrete riser inside the pumphouse on the WS shoulder. Brick and mortar channel on LS toe. Originally included in the 1964 O&M manual. FS Date: 8/23/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_18323\_30603.jpg



Brick and mortar channel on LS toe.

LM Start	<b>4.68</b>	Rating **	M	Issue No.	<b>935 (cont)</b>
LM End	<b>4.68</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP\_FA\_2016\_18323\_30602.jpg



Pump on pier and slide gate house on WS shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

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\_2016\_RD0524\_107\_67\_20161013\_00415.jpg



Looking northwest at untrimmed tree on landward slope.

LM Start	4.71	Rating **	C	Issue No.	133
LM End	4.71	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.889809 °	37.889809 °
				-121.329342 °	-121.329342 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No sign of new erosion observed at the site.					
06/24/2015: No significant change observed.					
06/19/2014: The erosion was repaired.					
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: Cracking erosion along the levee bank. Erosion appears to be caused by river flows. [2016 Site ID:RD0524U01RM45.27]					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.89	Rating **	M	Issue No.	964
LM End	4.89	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.887694 °	37.887694 °
				-121.331019 °	-121.331019 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:22728					
DS_ID:20628					
EP_NO: 3817					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Appears abandoned and if so should be done so properly.					
FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel pipe through the levee 3.0 feet below the crown, pump 120-feet off the LS toe. Siphon breaker in 24-inch CMP on the waterward shoulder (Permit No. 3817)					
Originally included in the 1964 O&M manual.					
FS Date: 8/23/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_22728\_38453.jpg



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

LM Start	<b>4.89</b>	Rating **	M	Issue No.	<b>964 (cont)</b>
LM End	<b>4.89</b>	Issue Type +	En	Location *	WS

Photo 2 of 2 : UCIP\_FA\_2016\_22728\_38452.jpg



Pipe visible on WS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2016


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 1 of 1 : FA\_2016\_RD0524\_107\_84\_20161013\_00412.jpg



Looking west at untrimmed tree on landward slope.

Photo 1 of 1 : FA\_2016\_RD0524\_107\_114\_20160929\_00177.jpg



Looking southwest at dense elderberry bush on landward slope and toe

Photo 1 of 1 : FA\_2016\_RD0524\_107\_188\_20161013\_00413.jpg



Looking south at oleander on landward slope.


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



## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 1 of 1 : FA\_2016\_RD0524\_107\_68\_20160929\_001116.jpg



Looking south at overhanging trees.

Photo 1 of 1 : FA\_2016\_RD0524\_107\_115\_20160929\_00178.jpg



Looking northwest at slope damage on landward slope.

* 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

## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

No Photos

Photo 1 of 1 : FA\_2016\_RD0524\_107\_85\_20160929\_00139.jpg



Looking south at untrimmed trees on landward slope.

Photo 1 of 1 : FA\_2016\_RD0524\_107\_932\_20160929\_00290.jpg



Looking south at untrimmed trees on landward slope and toe.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

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 landward toe.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_178\_20160929\_00223.jpg



Looking south at downed tree on landward slope.

LM Start	5.41	Rating **	U	Issue No.	970
LM End	5.41	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.880584 °	37.880584 °
				-121.332901 °	-121.332901 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50749 DS_ID:20630 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/16/2016 same as previous inspection hole in pipe is still present 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 (O&M references 10-inch pipe) through the levee, 6 feet below the crown. Pump located on waterside (WS), no pump found in 2013. Flap gate located on the WS end. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin River O&M Unit No. 7, April 1964, (HLM 5.48), Drawing No. 07-04-1490, sheet 1490/4, station 8+01.3] FS Date: 11/16/2016					

Photo 1 of 2 : UCIP\_FA\_2016\_50749\_30689.jpg



Pipe visible on WS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.41	Rating **	U	Issue No.	970 (cont)	
LM End	5.41	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.880584 °	37.880584 °	
				-121.332901 °	-121.332901 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50749 DS_ID:20630 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/16/2016 same as previous inspection hole in pipe is still present 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 (O&M references 10-inch pipe) through the levee, 6 feet below the crown. Pump located on waterside (WS), no pump found in 2013. Flap gate located on the WS end. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin River O&M Unit No. 7, April 1964, (HLM 5.48), Drawing No. 07-04-1490, sheet 1490/4, station 8+01.3] FS Date: 11/16/2016						

Photo 2 of 2 : UCIP\_FA\_2016\_50749\_30688.jpg



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

LM Start	5.41	Rating **	C	Issue No.	931	
LM End	5.41	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.880575 °		37.880575 °
				-121.332890 °		-121.332890 °
DWR ID	DWR_RD0524_01_s_2012_931					
Comment Code						
A1 : Exterminate rodents and backfill and compact or grout burrows.						
Inspector Comment						
LMA grouted rodent holes.						

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.42	Rating **	M	Issue No.	944
LM End	5.42	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.880358 °	37.880358 °
				-121.332972 °	-121.332972 °
DWR ID					
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 storm drain pipe through the levee 6.0 feet below the crown. Pump not found on LS. Originally included in the 1964 O&M manual.					
FS Date: 8/23/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_18348\_30706.jpg



10-inch pipe debris on the WS slope.

LM Start	<b>5.42</b>	Rating **	M	Issue No.	<b>944 (cont)</b>
LM End	<b>5.42</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP\_FA\_2016\_18348\_30705.jpg



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

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.42	Rating **	M	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.					

Photo 1 of 3 : FA\_2016\_RD0524\_107\_118\_20160929\_00180.jpg



Looking west at slope damage on landside slope.

LM Start	<b>5.42</b>	Rating **	M	Issue No.	<b>118 (cont)</b>
LM End	<b>5.42</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA\_2016\_RD0524\_107\_118\_20160929\_00181.jpg



Looking southeast at damaged slope.

LM Start	<b>5.42</b>	Rating **	M	Issue No.	<b>118 (cont)</b>
LM End	<b>5.42</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA\_2016\_RD0524\_107\_118\_20160929\_00182.jpg



Looking east at slope caving on landside slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.43	Rating **	U	Issue No.	134
LM End	5.43	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.880320 °	37.880320 °
				-121.333266 °	-121.333266 °
DWR ID					
Comment Code					
Inspector Comment					
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 seems to be getting worse. More material sloughing visible.					
08/07/2012: The erosion is underneath an irrigation pipe. The likely cause of the erosion is the pipe leakage. [2016 Site ID:RD0524U01RM45.97]					

LM Start	<b>5.43</b>	Rating **	U	Issue No.	<b>134 (cont)</b>
LM End	<b>5.43</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016\_RD0524U01RM45.97\_1.jpg



Close view of the erosion and the pipe on the site.

Photo 2 of 2 : SJR2016\_RD0524U01RM45.97\_4.jpg



Front view of the site.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	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 landward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_73\_20161013\_00414.jpg



Looking southwest at large untrimmed tree on landward slope.

LM Start	5.45	Rating **	M	Issue No.	189
LM End	5.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.879998 °	37.879998 °
				-121.333079 °	-121.333079 °
DWR ID	DWR_RD0524_01_s _ 2014_189				
Comment Code					
PR : Prunings					
Inspector Comment					
Prunings on landward shoulder should be removed.					

No Photos

LM Start	5.52	Rating **	C	Issue No.	96
LM End	5.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.878918 °	37.878918 °
				-121.333148 °	-121.333148 °
DWR ID	DWR_RD0524_01_s _ 2012_96				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.53	Rating **	M	Issue No.	135
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					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
6/19/2014: 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. [2016 Site ID:RD0524U01RM46.06]					

LM Start	<b>5.53</b>	Rating **	M	Issue No.	<b>135 (cont)</b>
LM End	<b>5.53</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016\_RD0524U01RM46.06\_3.jpg



Close view of the site. Note large trees at the levee shoulder.

Photo 2 of 2 : SJR2016\_RD0524U01RM46.06\_4.jpg



Close view of the erosion.

LM Start	5.58	Rating **	U	Issue No.	214
LM End	5.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.878083 °	37.878083 °
				-121.332717 °	-121.332717 °
DWR ID	DWR_RD0524_01_s_2016_214				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Tall weeds, grasses and trees blocking view of landward toe.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_214\_20160929\_00258.jpg

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.58	Rating **	U	Issue No.	214 (cont)	
LM End	5.58	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.878083 °		37.878083 °
				-121.332717 °		-121.332717 °
DWR ID	DWR_RD0524_01_s_2016_214					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Tall weeds, grasses and trees blocking view of landward toe.						

Photo 2 of 2 : FA\_2016\_RD0524\_107\_214\_20160929\_00259.jpg



Looking west at dense veg at landward toe.

LM Start	5.60	Rating **	C	Issue No.	137
LM End	5.61	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.877880 °	37.877880 °
				-121.332550 °	-121.332550 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No sign of erosion observed at the repaired site.					
06/24/2015: No significant change observed.					
06/19/2014: The erosion was repaired.					
08/13/2013: The boat survey found no significant change at this site, except slight animal activity was visible at the 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. Erosion site is located beneath Howard Road Bridge. Majority of the existing rip rap has slipped, dragging away levee materials and exposing the underlying soft soil.					
08/06/2010: Recommend for annual assessment and monitoring during flood events, per CLRO.					
09/30/2009: No major change observed since the last visit; upper portion of existing revetment has slipped, exposing the degrading bank; note that site # is the same as RM46.30, LM5.69 found in the CLRO CES Evaluation 2008 Report; site was previously rated "M".					
11/04/2008: Previously repaired using rock revetment; upper portion of the revetment is sliding, causing deformation on the levee slope; site is upstream of Howards Road Bridge. [2016 Site ID:RD0524U01RM46.12]					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.64	Rating **	U	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 landward slope.					

LM Start	<b>5.64</b>	Rating **	U	Issue No.	<b>215 (cont)</b>
LM End	<b>5.64</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : FA\_2016\_RD0524\_107\_215\_20160929\_00260.jpg



Looking north at damage slope on landward slope.

Photo 2 of 3 : FA\_2016\_RD0524\_107\_215\_20160929\_00261.jpg



Looking north at slope damage (ramp) on landward slope.

LM Start	<b>5.64</b>	Rating **	U	Issue No.	<b>215 (cont)</b>
LM End	<b>5.64</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA\_2016\_RD0524\_107\_215\_20160929\_00262.jpg



Looking west at damage slope 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

# Reclamation District No. 0524 Middle Roberts Island



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.74	Rating **	M	Issue No.	945
LM End	5.74	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.876001 °	37.876001 °
				-121.332725 °	-121.332725 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:18364  
DS\_ID:20649  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: Abandoned and should be done so properly.  
FIELD\_STRUCT\_DESC: 2.25-inch steel conduit for a 1-inch plastic electrical conduit through the levee 0.25-feet below the crown. Lines exposed on both slopes.  
FS Date: 8/23/2013

LM Start	<b>5.74</b>	Rating **	M	Issue No.	<b>945 (cont)</b>
LM End	<b>5.74</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_FA\_2016\_18364\_30761.jpg



Steel conduit and electrical conduit visible on the LS shoulder.

Photo 2 of 2 : UCIP\_FA\_2016\_18364\_30760.jpg



Steel conduit and electrical conduit visible on the WS shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.74	Rating **	M	Issue No.	967
LM End	5.74	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.876001 °	37.876001 °
				-121.332725 °	-121.332725 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:40793 DS_ID:20635 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Appears abandoned and if so should be done so properly. No permit identified for this crossing. FIELD_STRUCT_DESC: *ABANDONED* 1-inch steel waterline through the levee 1.0-foot below the crown. Pipe visible only on LS shoulder. FS Date: 8/23/2013					

Photo 1 of 1 : UCIP\_FA\_2016\_40793\_30781.jpg



Steel waterline visible on LS shoulder.

LM Start	5.77	Rating **	M	Issue No.	196
LM End	5.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.875510 °	37.875510 °
				-121.332953 °	-121.332953 °
DWR ID	DWR_RD0524_01_s_2015_196				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed tree on landward slope and toe.					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.79	Rating **	M	Issue No.	197 (cont)	
LM End	5.79	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.875310 °		37.875310 °
				-121.333065 °		-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 landward slope and levee crown.						

Photo 2 of 2 : FA\_2016\_RD0524\_107\_197\_20160929\_00240.jpg



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

LM Start	5.81	Rating **	M	Issue No.	946
LM End	5.81	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.874972 °	37.874972 °
				-121.333246 °	-121.333246 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18369 DS_ID:20636 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Apparent leak on WS shoulder at concrete riser. Erosion under pipe. This may have been fixed when the pipe was sleeved with a PVC liner. FIELD_STRUCT_DESC: 10-inch steel storm drain pipe through the levee 5.0 feet below the crown. Pump on the landward side. Siphon breaker in a 36-inch concrete riser on the waterward shoulder. Power pole at the landward toe. PVC liner sleeved inside steel pipe. Originally included in the 1964 O&M manual. FS Date: 8/23/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_18369\_30785.jpg



Concrete standpipe over pipe on WS shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.81	Rating **	M	Issue No.	946 (cont)	
LM End	5.81	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.874972 °	37.874972 °	
				-121.333246 °	-121.333246 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:18369						
DS_ID:20636						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Apparent leak on WS shoulder at concrete riser.						
Erosion under pipe. This may have been fixed when the pipe was sleeved with a PVC liner.						
FIELD_STRUCT_DESC: 10-inch steel storm drain pipe through the levee 5.0 feet below the crown. Pump on the landward side. Siphon breaker in a 36-inch concrete riser on the waterward shoulder. Power pole at the landward toe. PVC liner sleeved inside steel pipe.						
Originally included in the 1964 O&M manual.						
FS Date: 8/23/2013						

Photo 2 of 2 : UCIP\_FA\_2016\_18369\_30784.jpg



Pipe, pump, power pole, and meter off LS toe.

LM Start	5.82	Rating **	M	Issue No.	943
LM End	5.82	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.874829 °	37.874829 °
				-121.333265 °	-121.333265 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18705 DS_ID:20656 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Need to verify gasline exists and if so improve signage. FIELD_STRUCT_DESC: Gasline marker sign on WS shoulder. FS Date: 8/23/2013					

Photo 1 of 1 : UCIP\_FA\_2016\_18705\_31249.jpg



Gasline marker on WS shoulder.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.86	Rating **	U	Issue No.	139
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					
Comment Code					
Inspector Comment					
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. [2016 Site ID:RD0524U01RM46.39]					

LM Start	<b>5.86</b>	Rating **	U	Issue No.	<b>139 (cont)</b>
LM End	<b>5.86</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016\_RD0524U01RM46.39\_2.jpg



Close view of the erosion and the pipe on the site.

Photo 2 of 2 : SJR2016\_RD0524U01RM46.39\_4.jpg



Upstream view of the erosion and vegetation at the site.

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					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
District has grouted rodent holes, but other rodent holes have appeared.					

Photo 1 of 2 : FA\_2016\_RD0524\_107\_75\_20160929\_00124.jpg



Looking southwest at typical rodent holes on waterward slope.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.86	Rating **	U	Issue No.	74 (cont)	
LM End	5.87	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.874240 °		37.874165 °
				-121.333185 °		-121.333155 °
DWR ID	DWR_RD0524_01_s_2012_74					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Erosion on landward slope around intake pipe.						

Photo 3 of 3 : FA\_2016\_RD0524\_107\_74\_20160929\_00123.jpg



Erosion at waterward toe and around irrigation pipe at LM 5.92

LM Start	5.87	Rating **	M	Issue No.	951
LM End	5.87	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.874194 °	37.874194 °
				-121.333182 °	-121.333182 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:18379					
DS_ID:20638					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Heavy erosion around pipe upstream of standpipe on LS slope. Verify pipe is not leaking and repair erosion on LS slope.					
FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee 10.0 feet below the crown. Slant pump on pier at WS toe. 10-inch steel standpipe on LS slope. 42-inch concrete standpipe on LS slope. Filter plant, and power pole on LS toe. 1.5-inch galvanized iron electrical conduit at same location. Originally included in the 1964 O&M manual.					
FS Date: 8/23/2013					

Photo 1 of 2 : UCIP\_FA\_2016\_18379\_30829.jpg



Butterfly valves and standpipes on LS slope along with electrical conduit.

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

Looking west at walnut tree on landward slope.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.89	Rating **	U	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.					

LM Start	<b>5.89</b>	Rating **	U	Issue No.	<b>119 (cont)</b>
LM End	<b>5.89</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : FA\_2016\_RD0524\_107\_119\_20160929\_00183.jpg



Looking west at unauthorized ramp and landside slope damage.

Photo 2 of 2 : FA\_2016\_RD0524\_107\_119\_20160929\_00184.jpg



Looking southwest at damaged slope and ramp on landside slope.

LM Start	5.92	Rating **	U	Issue No.	200
LM End	5.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.873623 °	37.873623 °
				-121.332585 °	-121.332585 °
DWR ID	DWR_RD0524_01_f_2015_200				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Oleander bush on landward slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_200\_20160929\_00245.jpg



Looking south at oleander on landward slope 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

## Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.94	Rating **	M	Issue No.	87
LM End	5.95	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.873545 °	37.873445 °
				-121.332308 °	-121.332127 °
DWR ID	DWR_RD0524_01_s_2012_87				
Comment Code					
FE : Fence					
Inspector Comment					

LM Start	5.94	Rating **	U	Issue No.	88					
LM End	5.95	Issue Type +	En	Location *	LS					
Category	Earthen Levee			GPS Latitude/Longitude						
				Start	End					
Item	Vegetation			37.873543 °	37.873445 °					
				-121.332308 °	-121.332127 °					
DWR ID	DWR_RD0524_01_s_2012_88									
Comment Code										
V6 : Landscaping										
Inspector Comment										
Cactus and Century plants on landward slope and toe.										

A photograph showing a gravel driveway or path. A dense row of blue agave plants (Agave tequilana) is planted along the edge of the gravel area. In the background, there is a white building, possibly a barn or shed, and more greenery. The scene is outdoors and appears to be a rural or farm setting.

LM Start	5.96	Rating **	U	Issue No.	120					
LM End	5.96	Issue Type +	Ma	Location *	LS					
Category	Earthen Levee			GPS Latitude/Longitude						
				Start	End					
Item	Trim / Thin Trees			37.873347 °	37.873347 °					
				-121.332028 °	-121.332028 °					
DWR ID	DWR_RD0524_01_s_2012_120									
Comment Code										
T1 : Trim trees to at least five feet above ground level.										
Inspector Comment										

A gravel road stretches from the foreground into the distance, flanked by large, leafy trees on the right. The road leads towards a body of water under a clear blue sky.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.00	Rating **	M	Issue No.	933
LM End	6.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.873047 °	37.873047 °
				-121.331408 °	-121.331408 °
DWR ID	DWR_RD0524_01_s_2012_933				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Landowner cut steps into landside slope.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_933\_20160929\_00291.jpg



Looking north at steps cut into landward slope.

LM Start	6.02	Rating **	M	Issue No.	191
LM End	6.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.872844 °	37.872844 °
				-121.331070 °	-121.331070 °
DWR ID	DWR_RD0524_01_s_2014_191				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Cactus at landward toe.					

No Photos

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

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

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.15	Rating **	M	Issue No.	955
LM End	6.15	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.871138 °	37.871138 °
				-121.330146 °	-121.330146 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:18392  
DS\_ID:20641  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: Pipe and pump abandoned and should be done so properly.  
FIELD\_STRUCT\_DESC: \*ABANDONED\*10-inch pipe through levee 12.0 feet below crown, pump on the waterward slope. Originally included in the 1964 O&M manual.  
FS Date: 8/23/2013

LM Start	<b>6.15</b>	Rating **	M	Issue No.	<b>955 (cont)</b>
LM End	<b>6.15</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_FA\_2016\_18392\_30910.jpg



Pump and open pipe visible on WS slope.

Photo 2 of 2 : UCIP\_FA\_2016\_18392\_30909.jpg



Pipe and concrete standpipe visible on LS toe.

**\* Location**

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

**\*\* Rating**

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

**+ Issue Type**

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.15	Rating **	M	Issue No.	948
LM End	6.15	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.871118 °	37.871118 °
				-121.330137 °	-121.330137 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:22073  
DS\_ID:24052  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: Abandoned and should be done so properly.  
FIELD\_STRUCT\_DESC: \*ABANDONED\* 1.75-inch galvanized iron electrical conduit through the levee 1-foot below the crown. Power pole on LS toe.  
FS Date: 8/23/2013

LM Start	<b>6.15</b>	Rating **	M	Issue No.	<b>948 (cont)</b>
LM End	<b>6.15</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_FA\_2016\_22073\_37670.jpg



Pipe visible on LS slope.

Photo 2 of 2 : UCIP\_FA\_2016\_22073\_37669.jpg



Pipe visible on WS slope.

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.15	Rating **	U	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					
Large tree fallen across levee crown blocking access. Fallen tree branches and limbs left on landward slope.					

LM Start	<b>6.15</b>	Rating **	U	Issue No.	<b>81 (cont)</b>
LM End	<b>6.15</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 4 : FA\_2016\_RD0524\_107\_81\_20160929\_00132.jpg



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

Photo 2 of 4 : FA\_2016\_RD0524\_107\_81\_20160929\_00133.jpg



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

LM Start	<b>6.15</b>	Rating **	U	Issue No.	<b>81 (cont)</b>
LM End	<b>6.15</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 4 : FA\_2016\_RD0524\_107\_81\_20160929\_00134.jpg



Looking southwest at large tree across levee crown. (Fall 2015)

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.15	Rating **	U	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						
Large tree fallen across levee crown blocking access. Fallen tree branches and limbs left on landward slope.						

Photo 4 of 4 : FA\_2016\_RD0524\_107\_81\_20160929\_00135.jpg



Looking south at large tree across levee crown. (Fall 2015)

LM Start	6.17	Rating **	U	Issue No.	98
LM End	6.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.870842 °	37.870842 °
				-121.330000 °	-121.330000 °
DWR ID	DWR_RD0524_01_s_2012_98				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_98\_20160929\_00156.jpg



Looking southeast at untrimmed trees at landward toe.

LM Start	6.17	Rating **	M	Issue No.	97
LM End	6.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.870840 °	37.870840 °
				-121.329993 °	-121.329993 °
DWR ID	DWR_RD0524_01_s_2012_97				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

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

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.20	Rating **	U	Issue No.	86
LM End	6.20	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.870388 °	37.870388 °
				-121.329840 °	-121.329840 °
DWR ID	DWR_RD0524_01_s_ 2016_86				
Comment Code					
PR : Prunings					
Inspector Comment					
Large pruning pile left at landward toe. After farmer cleared field.					

Photo 1 of 1 : FA\_2016\_RD0524\_107\_86\_20160929\_00140.jpg



Looking west at prunings at landward toe and berm.

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