

**Flood Control Project Maintenance
Levee Inspections**

Fall 2013 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD0524	Overall LMA Rating	Total LMA Miles						
Reclamation District No. 0524 Middle Roberts Island	U	6.26						
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	0.17	0.30	1.37	21.88%	0.07	0.02		
Trim / Thin Trees	0.90	0.09	1.26	20.13%				
Encroachments	0.09	0.02	0.17	2.72%	0.23	0.12		
Animal Control	0.32		0.32	5.11%				
Slope Stability	0.22	0.01	0.26	4.15%				
Erosion / Bank Caving	0.11	0.01	0.15	2.40%				
Crown Surface / Depressions / Rutting	0.05		0.05	0.80%				
Operations & Maintenance Manuals	0.06		0.06	0.96%				
Emergency Supplies & Equipment	0.06		0.06	0.96%				
Flood Preparedness & Training	0.06		0.06	0.96%				
<i>Interior Drainage & Piping Systems</i>								
Metal Pipes	0.01		0.01	0.16%				
<i>Supplemental</i>								
DWR Erosion Survey	0.02	0.49	1.98	31.63%				
LMA Totals:	2.08	0.92	5.76	92.01%	0.30	0.14	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2013 Levee Inspection Results

Reclamation District No. 0524 Middle Roberts Island

	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 2013 Levee Inspection Results

Reclamation District No. 0524 Middle Roberts Island

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Left	6.26
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	03/26/2013 - 03/26/2013		10/22/2013 - 10/22/2013	
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 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
1	0.00	0.00	Earthen Levee	Operations & Maintenance Manuals	WS	M		°	°	121
						Ma		°	°	
DWR ID: DWR_RD0524_01_s_2012_121										
2	0.00	0.00	Earthen Levee	Flood Preparedness & Training	WS	M		°	°	123
						Ma		°	°	
DWR ID: DWR_RD0524_01_s_2012_123										
3	0.00	0.00	Earthen Levee	Emergency Supplies & Equipment	WS	M		°	°	138
						Ma		°	°	
DWR ID: DWR_RD0524_01_s_2013_138										
4	0.18	0.18	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/13/2013: Erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2013 Site ID:RD0524U01RM40.85]	37.939085 ° -121.343917 °	37.939085 ° -121.343917 °	1 Y
DWR ID:										
5	0.22	0.22	Earthen Levee	Crown Surface / Depressions / Rutting	CR	M	C2 : Repair depressions or ruts in the crown or slope.	37.938890 ° -121.343657 °	37.938890 ° -121.343657 °	3 Y
DWR ID: DWR_RD0524_01_s_2012_3										
6	0.36	0.36	Earthen Levee	Encroachments	LS	M	GA : Garbage	37.938338 ° -121.341290 °	37.938338 ° -121.341290 °	15 Y
DWR ID: DWR_RD0524_01_s_2012_15										
7	0.40	0.40	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/13/2013: No significant change at this site. 8/7/2012: Erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation. [2013 Site ID:RD0524U01RM40.99]	37.938870 ° -121.340460 °	37.938870 ° -121.340460 °	5 Y
DWR ID:										
8	0.53	0.60	Supplemental	DWR Erosion Survey	WS	C	Inspector Comments: 08/13/2013: Repaired site. No new erosion found at the site. 08/07/2012: The site has been visited by boat survey. The site seems to have been repaired. 08/23/2011: No significant changes observed on site. 09/07/2010: No significant changes observed on site. Some emergent vegetation is visible at the lower and middle slope. Existing revetment is no longer adequately protecting the over-steepened slope. Some of the broken concrete used as revetment has slid, dragging levee materials away from the slope and creating notches. 09/29/2009: Erosion site extends from RM 41.11 to 41.18; existing revetment is no longer adequately protecting the over-steepened slope. 2008: Existing concrete slabs were placed as temporary fix; some of the slabs have started to slide, dragging levee materials away from the slope and creating notches; note that a sewage treatment plant is located on the landside of the levee. [2013 Site ID:RD0524U01RM41.15]	37.938895 ° -121.337602 °	37.938895 ° -121.337602 °	29
DWR ID:										

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River				Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
9	0.63	0.63	Earthen Levee	Slope Stability	WS	M	S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.	37.938247 ° -121.336503 °	37.938247 ° -121.336503 °	10 Y
DWR ID: DWR_RD0524_01_s_2012_10										
10	0.63	0.64	Earthen Levee	Vegetation	WS	M	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.938247 ° -121.336503 °	37.938197 ° -121.336405 °	11 Y
DWR ID: DWR_RD0524_01_s_2012_11										
11	0.65	0.66	Earthen Levee	Slope Stability	WS	M	S1 : Repair slope instability.	37.938105 ° -121.336288 °	37.938023 ° -121.336173 °	13 Y
DWR ID: DWR_RD0524_01_s_2012_13										
12	0.68	0.68	Earthen Levee	Vegetation	WS	M	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.937808 ° -121.335913 °	37.937808 ° -121.335913 °	14 Y
DWR ID: DWR_RD0524_01_s_2012_14										
13	0.77	0.78	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 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. [2013 Site ID:RD0524U01RM41.39]	37.936821 ° -121.334582 °	37.936821 ° -121.334582 °	55 Y
DWR ID:										
14	0.78	0.78	Earthen Levee	Vegetation	LS	M	V2 : Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Dense vegetation at landside toe along fence line.	37.936555 ° -121.334847 °	37.936555 ° -121.334847 °	262 Y
DWR ID: DWR_RD0524_01_s_2012_262										
15	0.79	0.79	Earthen Levee	Trim / Thin Trees	LS	M	T1 : Trim trees to at least five feet above ground level.	37.936444 ° -121.334797 °	37.936444 ° -121.334797 °	76 Y
DWR ID: DWR_RD0524_01_s_2012_76										
16	0.82	0.82	Earthen Levee	Erosion / Bank Caving	LS	U	E2 : Schedule repair of erosion site prior to the next inspection. Inspector Comments: Several holes and finger erosions on landward slope.	37.936093 ° -121.334648 °	37.936004 ° -121.334615 °	2 Y
DWR ID: DWR_RD0524_01_f_2013_2										
17	0.83	0.84	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 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. [2013 Site ID:RD0524U01RM41.44]	37.935930 ° -121.334133 °	37.935930 ° -121.334133 °	79 Y
DWR ID:										
18	0.91	0.91	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 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. [2013 Site ID:RD0524U01RM41.5]	37.935576 ° -121.333202 °	37.935576 ° -121.333202 °	90 Y
DWR ID:										
19	0.92	0.92	Earthen Levee	Encroachments	WS	M	PI : Pipe Inspector Comments: Inch and half metal pipe should be removed.	37.935267 ° -121.332985 °	37.935267 ° -121.332985 °	122 Y
DWR ID: DWR_RD0524_01_s_2013_122										

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 01 San Joaquin River						Left	6.26	10/22/2013 10/22/2013	Richard Willoughby	
LMR No.	Levee Mile		Category	Item	Location * + Rating	Action/Comment	GPS Latitude/Longitude		Issue No.	Photo
	Start	End					Start	End		
20	0.94	1.02	Earthen Levee	Trim / Thin Trees	LS Ma	T1 : Trim trees to at least five feet above ground level.	37.935259 ° -121.332864 °	37.935049 ° -121.331334 °	77 Y	
							DWR ID: DWR_RD0524_01_s_2012_77			
21	0.97	0.97	Earthen Levee	Trim / Thin Trees	WS Ma	T4 : Trim trees over roadway to at least 12 feet above ground level.	37.935181 ° -121.332297 °	37.935181 ° -121.332297 °	20 Y	
							DWR ID: DWR_RD0524_01_f_2013_20			
22	1.00	1.01	Supplemental	DWR Erosion Survey	WS Ma	Inspector Comments: 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. [2013 Site ID:RD0524U01RM41.59]	37.935326 ° -121.331537 °	37.935326 ° -121.331537 °	99 Y	
							DWR ID:			
23	1.00	1.00	Supplemental	DWR Erosion Survey	WS Ma	Inspector Comments: 08/13/2013: No significant change at this site. 08/07/2012: The erosion was discovered during the boat survey. [2013 Site ID:RD0524U01RM41.58]	37.935410 ° -121.331560 °	37.935410 ° -121.331560 °	125 Y	
							DWR ID:			
24	1.03	1.03	Earthen Levee	Erosion / Bank Caving	WS Ma	E2 : Schedule repair of erosion site prior to the next inspection. Inspector Comments: Minor erosion was noted next to repaired site.	37.935018 ° -121.331248 °	37.935098 ° -121.331645 °	17 Y	
							DWR ID: DWR_RD0524_01_s_2012_17			
25	1.09	1.09	Earthen Levee	Slope Stability	LS Ma	S1 : Repair slope instability.	37.934645 ° -121.330310 °	37.934645 ° -121.330310 °	18 Y	
							DWR ID: DWR_RD0524_01_s_2012_18			
26	1.14	1.17	Earthen Levee	Trim / Thin Trees	WS Ma	T1 : Trim trees to at least five feet above ground level.	37.934118 ° -121.329657 °	37.933775 ° -121.329305 °	19 Y	
							DWR ID: DWR_RD0524_01_s_2012_19			

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
27	1.16	1.24	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 08/13/2013: No significant change at this site. 08/07/2012: The site has been visited by boat survey. No significant changes observed 08/23/2011: No significant changes observed on site. 9/07/2010: No significant changes 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. [2013 Site ID:RD0524U01RM41.79]	37.933347 ° -121.329110 °	37.933347 ° -121.329110 °	126 Y
DWR ID:										
28	1.17	1.25	Earthen Levee	Vegetation	LS	M Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.933775 ° -121.329250 °	37.932784 ° -121.328765 °	915 Y
DWR ID: DWR_RD0524_01_s_2012_915										
29	1.26	1.26	Earthen Levee	Encroachments	LS	U En	RA : Ramp Inspector Comments: Unauthorized ramps on landside slope. Ramps were caused by vehicle traffic.	37.932533 ° -121.328650 °	37.932533 ° -121.328650 °	263 Y
DWR ID: DWR_RD0524_01_s_2012_263										
30	1.29	1.32	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 08/13/2013: New signs of animal activity were found. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2013 Site ID:RD0524U01RM41.92]	37.931858 ° -121.328300 °	37.931858 ° -121.328300 °	127 Y
DWR ID:										
31	1.31	1.31	Earthen Levee	Encroachments	WS	M Ma	PI : Pipe Inspector Comments: Pipe is not in use and needs to be properly abandoned.	37.931948 ° -121.328387 °	37.931948 ° -121.328387 °	33 Y
DWR ID: DWR_RD0524_01_s_2012_33										
32	1.33	1.37	Earthen Levee	Crown Surface / Depressions / Rutting	CR	M Ma	C3 : Add appropriate gravel or road base. Grade and compact.	37.931658 ° -121.328255 °	37.931085 ° -121.328112 °	130
DWR ID: DWR_RD0524_01_s_2013_130										
33	1.39	1.39	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 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. [2013 Site ID:RD0524U01RM42.03]	37.930575 ° -121.328090 °	37.930575 ° -121.328090 °	128 Y
DWR ID:										

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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River				Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location * + Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End					Start	End	Photo
34	1.45	1.47	Supplemental	DWR Erosion Survey	WS U Ma	Inspector Comments: 08/13/2013: The site is located approximately 400 ft downstream SR 4 Bridge. Dense vegetation is visible at the toe. [2013 Site ID:RD0524U01RM42.09]	37.929650 ° -121.328110 °	37.929650 ° -121.328110 °	129 Y
DWR ID: DWR_RD0524_01_s_2012_916									
35	1.51	1.51	Earthen Levee	Trim / Thin Trees	LS M Ma	T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.	37.929118 ° -121.328368 °	37.929118 ° -121.328368 °	916 Y
DWR ID: DWR_RD0524_01_s_2012_916									
36	1.56	1.74	Earthen Levee	Vegetation	LS U Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.928388 ° -121.328280 °	37.926497 ° -121.326248 °	23 Y
DWR ID: DWR_RD0524_01_s_2012_23									
37	1.58	1.64	Supplemental	DWR Erosion Survey	WS U Ma	Inspector Comments: 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 changes observed on site. Trees concerned still in place. 09/07/2010: No significant changes 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. [2013 Site ID:RD0524U01RM42.2]	37.927770 ° -121.327870 °	37.927770 ° -121.327870 °	131 Y
DWR ID: DWR_RD0524_01_s_2012_23									
38	1.60	1.60	Earthen Levee	Slope Stability	CR M Ma	S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.	37.927775 ° -121.327860 °	37.927775 ° -121.327860 °	136 Y
DWR ID: DWR_RD0524_01_s_2013_136									
39	1.62	1.63	Earthen Levee	Vegetation	LS U Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.927635 ° -121.327812 °	37.927540 ° -121.327648 °	24 Y
DWR ID: DWR_RD0524_01_s_2012_24									
40	1.62	1.63	Earthen Levee	Vegetation	WS U Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.927635 ° -121.327812 °	37.927540 ° -121.327648 °	25 Y
DWR ID: DWR_RD0524_01_s_2012_25									
41	1.63	1.66	Earthen Levee	Erosion / Bank Caving	WS M Ma	E1 : Note and monitor erosion site.	37.927507 ° -121.327593 °	37.927295 ° -121.327298 °	26 Y
DWR ID: DWR_RD0524_01_s_2012_26									
42	1.64	1.64	Earthen Levee	Encroachments	WS U En	PO : Pole Inspector Comments: Landowner constructed boat dock without permission from the CVFPB.	37.927372 ° -121.327278 °	37.927372 ° -121.327278 °	39 Y
DWR ID: DWR_RD0524_01_s_2012_39									
43	1.66	1.70	Earthen Levee	Trim / Thin Trees	WS N Ma	T5 : Tree stumps. Inspector Comments: Several tree stumps on waterside shoulder.	37.927255 ° -121.327137 °	37.926855 ° -121.326672 °	8 Y
DWR ID: DWR_RD0524_01_s_2012_8									

*** Location**

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A/W : Acceptable but Monitor & Maintain

+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway					Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River					Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
44	1.69	1.69	Earthen Levee	Encroachments	WS Ma	M	ST : Stairway Inspector Comments: Stairs and retaining wall	37.927018 ° -121.326872 °	37.927018 ° -121.326872 °	45 Y
DWR ID: DWR_RD0524_01_s_2012_45										
45	1.71	1.73	Earthen Levee	Slope Stability	WS Ma	M	S1 : Repair slope instability.	37.926728 ° -121.326597 °	37.926730 ° -121.326508 °	27 Y
DWR ID: DWR_RD0524_01_s_2012_27										
46	1.75	1.75	Earthen Levee	Encroachments	LS Ma	M	GA : Garbage Inspector Comments: Large pruning piles on landside slope.	37.926322 ° -121.326115 °	37.926322 ° -121.326115 °	28 Y
DWR ID: DWR_RD0524_01_s_2012_28										
47	1.77	1.77	Earthen Levee	Trim / Thin Trees	LS Ma	M	T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.	37.925993 ° -121.325777 °	37.926152 ° -121.325927 °	46 Y
DWR ID: DWR_RD0524_01_s_2012_46										
48	1.80	1.80	Earthen Levee	Encroachments	LS Ma	A/W	PR : Prunings	37.925752 ° -121.325592 °	37.925752 ° -121.325592 °	100 Y
DWR ID: DWR_RD0524_01_s_2012_100										
49	1.82	1.82	Earthen Levee	Encroachments	LS En	A/W	GA : Garbage Inspector Comments: Landowner storing appliances and equipment at landside toe.	37.925365 ° -121.325223 °	37.925365 ° -121.325223 °	103 Y
DWR ID: DWR_RD0524_01_s_2012_103										
50	1.90	1.95	Earthen Levee	Vegetation	LS En	M	V6 : Landscaping	37.924364 ° -121.324473 °	37.923805 ° -121.324238 °	78 Y
DWR ID: DWR_RD0524_01_s_2012_78										
51	1.95	1.95	Earthen Levee	Vegetation	WSA/W En	M	V2 : Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Bamboo outside of the twenty foot vegetation zone.	37.923808 ° -121.324260 °	37.923808 ° -121.324260 °	104 Y
DWR ID: DWR_RD0524_01_s_2012_104										
52	2.01	2.01	Earthen Levee	Trim / Thin Trees	LS En	A/W	T1 : Trim trees to at least five feet above ground level.	37.923032 ° -121.323933 °	37.923032 ° -121.323933 °	105 Y
DWR ID: DWR_RD0524_01_s_2012_105										
53	2.01	2.01	Earthen Levee	Encroachments	LS En	M	ST : Stairway Inspector Comments: Landowner installed rubber tires for a stairway on landside slope.	37.923068 ° -121.323990 °	37.923068 ° -121.323990 °	4 Y
DWR ID: DWR_RD0524_01_f_2012_4										
54	2.02	2.02	Earthen Levee	Vegetation	LS En	M	V6 : Landscaping	37.922923 ° -121.323837 °	37.922923 ° -121.323837 °	106 Y
DWR ID: DWR_RD0524_01_s_2012_106										
55	2.15	2.22	Earthen Levee	Vegetation	WSA/W Ma	M	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.921540 ° -121.322293 °	37.920959 ° -121.321365 °	6 Y
DWR ID: DWR_RD0524_01_f_2012_6										
56	2.17	2.18	Earthen Levee	Erosion / Bank Caving	WSA/W Ma	M	E1 : Note and monitor erosion site.	37.921383 ° -121.322043 °	37.921300 ° -121.321902 °	30 Y
DWR ID: DWR_RD0524_01_s_2012_30										

*** Location**

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WS : Water Side
CR : Crown

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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 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River				Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
57	2.19	2.19	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 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. [2013 Site ID:RD0524U01RM42.79]	37.920992 ° -121.321370 °	37.920992 ° -121.321370 °	132 Y
DWR ID:										
58	2.22	2.28	Earthen Levee	Slope Stability	WS	M	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	37.920992 ° -121.321373 °	37.920505 ° -121.320485 °	31 Y
DWR ID: DWR_RD0524_01_s_2012_31										
59	2.25	2.28	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/13/2013: An irrigation pipe is on site. [2013 Site ID:RD0524U01RM42.84]	37.920650 ° -121.320370 °	37.920650 ° -121.320370 °	133 Y
DWR ID:										
60	2.29	2.31	Earthen Levee	Vegetation	LS	U	V4 : Elderberries are blocking visibility and flood fight capability.	37.920372 ° -121.320230 °	37.920273 ° -121.320022 °	32 Y
DWR ID: DWR_RD0524_01_s_2012_32										
61	2.31	2.33	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 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. [2013 Site ID:RD0524U01RM42.93]	37.919885 ° -121.319710 °	37.919885 ° -121.319710 °	134 Y
DWR ID:										
62	2.34	2.35	Earthen Levee	Slope Stability	WS	M	S2 : Repair the levee slope damaged by foot traffic and prevent access where possible. Inspector Comments: Slope damage caused by walking traffic and using bank as a fishing platform.	37.919885 ° -121.319713 °	37.919703 ° -121.319702 °	34 Y
DWR ID: DWR_RD0524_01_s_2012_34										
63	2.35	2.35	Earthen Levee	Trim / Thin Trees	LS	M	T1 : Trim trees to at least five feet above ground level.	37.919742 ° -121.319623 °	37.919742 ° -121.319623 °	107 Y
DWR ID: DWR_RD0524_01_s_2012_107										
64	2.44	2.48	Earthen Levee	Vegetation	LS	U	V4 : Elderberries are blocking visibility and flood fight capability.	37.918498 ° -121.321078 °	37.918515 ° -121.321110 °	35 Y
DWR ID: DWR_RD0524_01_s_2012_35										
65	2.46	2.50	Earthen Levee	Erosion / Bank Caving	WS	M	E1 : Note and monitor erosion site.	37.918628 ° -121.320817 °	37.918438 ° -121.321452 °	36 Y
DWR ID: DWR_RD0524_01_s_2012_36										
66	2.48	2.48	Earthen Levee	Trim / Thin Trees	LS	M	T1 : Trim trees to at least five feet above ground level.	37.918480 ° -121.321114 °	37.918480 ° -121.321114 °	80 Y
DWR ID: DWR_RD0524_01_s_2012_80										
67	2.52	2.52	Earthen Levee	Vegetation	LS	U	V4 : Elderberries are blocking visibility and flood fight capability.	37.918345 ° -121.321765 °	37.918302 ° -121.321923 °	37 Y
DWR ID: DWR_RD0524_01_s_2012_37										
68	2.53	2.53	Earthen Levee	Vegetation	WS	U	V4 : Elderberries are blocking visibility and flood fight capability.	37.918287 ° -121.321980 °	37.918287 ° -121.321980 °	38 Y
DWR ID: DWR_RD0524_01_s_2012_38										

* Location		** Rating		+ Issue Type	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River				Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
69	2.55	2.59	Earthen Levee	Slope Stability	LS	M Ma	S1 : Repair slope instability.	37.918060 ° -121.322384 °	37.917667 ° -121.322713 °	82
								DWR ID: DWR_RD0524_01_s_2012_82		
70	2.56	2.56	Earthen Levee	Vegetation	LS	M Ma	V4 : Elderberries are blocking visibility and flood fight capability.	37.918047 ° -121.322415 °	37.918047 ° -121.322415 °	40
								DWR ID: DWR_RD0524_01_s_2012_40		
71	2.59	2.59	Earthen Levee	Vegetation	LS	M Ma	V4 : Elderberries are blocking visibility and flood fight capability.	37.917673 ° -121.322718 °	37.917673 ° -121.322718 °	41
								DWR ID: DWR_RD0524_01_s_2012_41		
72	2.59	2.59	Earthen Levee	Encroachments	WS	U En	BU : Building	37.917673 ° -121.322718 °	37.917673 ° -121.322718 °	42 Y
								DWR ID: DWR_RD0524_01_s_2012_42		
73	2.59	2.59	Earthen Levee	Encroachments	WS	M En	RA : Ramp	37.917431 ° -121.322780 °	37.917431 ° -121.322780 °	7 Y
								DWR ID: DWR_RD0524_01_f_2012_7		
74	2.60	2.60	Earthen Levee	Encroachments	LS	M En	PO : Pole Inspector Comments: Old fence poles on landside shoulder and slope should be removed.	37.917538 ° -121.322757 °	37.917538 ° -121.322757 °	12 Y
								DWR ID: DWR_RD0524_01_f_2012_12		
75	2.60	2.60	Earthen Levee	Animal Control	LS	M Ma	A2 : Repair the levee slope damaged by livestock and prevent large animal access.	37.917475 ° -121.322808 °	37.917475 ° -121.322808 °	917
								DWR ID: DWR_RD0524_01_s_2012_917		
76	2.61	2.61	Earthen Levee	Vegetation	LS	A/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.917228 ° -121.322730 °	37.917228 ° -121.322730 °	9
								DWR ID: DWR_RD0524_01_s_2012_9		
77	2.65	2.65	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 08/13/2013: No significant change observed. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2013 Site ID:RD0524U01RM43.23]	37.916650 ° -121.321980 °	37.916650 ° -121.321980 °	135 Y
								DWR ID:		
78	2.66	2.66	Earthen Levee	Vegetation	LS	M Ma	V4 : Elderberries are blocking visibility and flood fight capability.	37.916780 ° -121.322095 °	37.916780 ° -121.322095 °	43
								DWR ID: DWR_RD0524_01_s_2012_43		
79	2.67	2.69	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.916718 ° -121.322020 °	37.916502 ° -121.321980 °	918
								DWR ID: DWR_RD0524_01_s_2012_918		
80	2.67	2.67	Earthen Levee	Encroachments	WS	U En	RA : Ramp	37.916698 ° -121.322007 °	37.916698 ° -121.322007 °	920 Y
								DWR ID: DWR_RD0524_01_s_2012_920		
81	2.67	2.67	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E2 : Schedule repair of erosion site prior to the next inspection.	37.916650 ° -121.321987 °	37.916650 ° -121.321987 °	919
								DWR ID: DWR_RD0524_01_s_2012_919		
82	2.69	2.80	Earthen Levee	Trim / Thin Trees	LS	M Ma	T4 : Trim trees over roadway to at least 12 feet above ground level. Inspector Comments: Trim over hanging trees at least 12 feet above ground level.	37.916418 ° -121.321963 °	37.915142 ° -121.323018 °	44 Y
								DWR ID: DWR_RD0524_01_s_2012_44		

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River						Left	6.26	10/22/2013 10/22/2013	Richard Willoughby
LMR No.	Levee Mile		Category	Item	Location * + Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End					Start	End	
83	2.71	2.71	Earthen Levee	Erosion / Bank Caving	WS M Ma	E2 : Schedule repair of erosion site prior to the next inspection. Inspector Comments: Large erosion around irrigation pipe.	37.916224 ° -121.322115 °	37.916224 ° -121.322115 °	21 Y
DWR ID: DWR_RD0524_01_f_2013_21									
84	2.73	2.73	Earthen Levee	Trim / Thin Trees	LS M Ma	T4 : Trim trees over roadway to at least 12 feet above ground level.	37.915968 ° -121.322275 °	37.915968 ° -121.322275 °	264 Y
DWR ID: DWR_RD0524_01_s_2012_264									
85	2.73	2.77	Earthen Levee	Trim / Thin Trees	LS M Ma	T1 : Trim trees to at least five feet above ground level.	37.915747 ° -121.322470 °	37.915492 ° -121.322639 °	60 Y
DWR ID: DWR_RD0524_01_s_2012_60									
86	2.77	2.77	Earthen Levee	Encroachments	LS A/W Ma	TR : Tree or limb Inspector Comments: Broken tree branch.	37.915503 ° -121.322745 °	37.915503 ° -121.322745 °	70 Y
DWR ID: DWR_RD0524_01_s_2012_70									
87	2.81	2.81	Earthen Levee	Encroachments	WS M En	PR : Prunings	37.915125 ° -121.323227 °	37.915125 ° -121.323227 °	921 Y
DWR ID: DWR_RD0524_01_s_2012_921									
88	2.82	2.82	Earthen Levee	Vegetation	LS U Ma	V4 : Elderberries are blocking visibility and flood fight capability.	37.915022 ° -121.323443 °	37.915022 ° -121.323443 °	48 Y
DWR ID: DWR_RD0524_01_s_2012_48									
89	2.83	2.83	Earthen Levee	Trim / Thin Trees	LS U Ma	T2 : Thin trees to allow visibility of the ground and room to flood fight.	37.915063 ° -121.323585 °	37.915063 ° -121.323585 °	91 Y
DWR ID: DWR_RD0524_01_s_2012_91									
90	2.88	2.88	Earthen Levee	Vegetation	LS U Ma	V4 : Elderberries are blocking visibility and flood fight capability.	37.914427 ° -121.324198 °	37.914427 ° -121.324198 °	49 Y
DWR ID: DWR_RD0524_01_s_2012_49									
91	2.93	2.95	Earthen Levee	Encroachments	LS U Ma	PR : Prunings	37.913767 ° -121.324427 °	37.913503 ° -121.324488 °	50 Y
DWR ID: DWR_RD0524_01_s_2012_50									
92	2.96	2.96	Earthen Levee	Trim / Thin Trees	LS M Ma	T1 : Trim trees to at least five feet above ground level.	37.913415 ° -121.324503 °	37.913415 ° -121.324503 °	51 Y
DWR ID: DWR_RD0524_01_s_2012_51									
93	2.96	2.96	Supplemental	DWR Erosion Survey	WS U Ma	Inspector Comments: 08/13/2013: No significant change observed. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2013 Site ID:RD0524U01RM43.52]	37.913010 ° -121.324490 °	37.913010 ° -121.324490 °	139 Y
DWR ID:									
94	3.04	3.04	Earthen Levee	Animal Control	LS M Ma	A2 : Repair the levee slope damaged by livestock and prevent large animal access.	37.912163 ° -121.324702 °	37.912163 ° -121.324702 °	924 Y
DWR ID: DWR_RD0524_01_s_2012_924									
95	3.10	3.12	Earthen Levee	Animal Control	LS M Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	37.911382 ° -121.324928 °	37.911088 ° -121.325113 °	925 Y
DWR ID: DWR_RD0524_01_s_2012_925									

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
96	3.23	3.31	Supplemental	DWR Erosion Survey	WS	C Ma	Inspector Comments: 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 [2013 Site ID:RD0524U01RM43.83]	37.908544 ° -121.324894 °	37.908544 ° -121.324894 °	140
DWR ID:										
97	3.29	3.31	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2013 Site ID:RD0524U01RM43.86]	37.908090 ° -121.325090 °	37.908090 ° -121.325090 °	141 Y
DWR ID:										
98	3.33	3.35	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.908158 ° -121.325418 °	37.907872 ° -121.325443 °	926
DWR ID: DWR_RD0524_01_s_2012_926										
99	3.37	3.40	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.907645 ° -121.325442 °	37.907157 ° -121.325408 °	52
DWR ID: DWR_RD0524_01_s_2012_52										
100	3.38	3.39	Earthen Levee	Vegetation	LS	U En	V6 : Landscaping	37.907407 ° -121.325435 °	37.907177 ° -121.325392 °	92 Y
DWR ID: DWR_RD0524_01_s_2012_92										
101	3.39	3.45	Earthen Levee	Animal Control	WS	M Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	37.907283 ° -121.325432 °	37.906503 ° -121.325002 °	53
DWR ID: DWR_RD0524_01_s_2012_53										
102	3.43	3.49	Earthen Levee	Trim / Thin Trees	LS	U Ma	T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.	37.906747 ° -121.325248 °	37.906192 ° -121.324543 °	54 Y
DWR ID: DWR_RD0524_01_s_2012_54										
103	3.45	3.45	Earthen Levee	Encroachments	LS	M Ma	MA : Material Inspector Comments: Broken concrete pipes	37.906540 ° -121.325015 °	37.906540 ° -121.325015 °	56 Y
DWR ID: DWR_RD0524_01_s_2012_56										
104	3.47	3.47	Earthen Levee	Trim / Thin Trees	LS	U Ma	T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.	37.906265 ° -121.324643 °	37.906265 ° -121.324643 °	93 Y
DWR ID: DWR_RD0524_01_s_2012_93										
105	3.53	3.53	Earthen Levee	Encroachments	LS	M En	RA : Ramp Inspector Comments: Unauthorized ramp on landside slope.	37.905552 ° -121.323847 °	37.905552 ° -121.323847 °	265 Y
DWR ID: DWR_RD0524_01_s_2012_265										
106	3.54	3.64	Earthen Levee	Trim / Thin Trees	LS	M Ma	T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.	37.905638 ° -121.323892 °	37.904430 ° -121.324570 °	57
DWR ID: DWR_RD0524_01_s_2012_57										
107	3.55	3.58	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 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. [2013 Site ID:RD0524U01RM44.13]	37.904630 ° -121.323610 °	37.904630 ° -121.323610 °	142 Y
DWR ID:										

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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway							Bank	Unit Miles	Inspection Start/End		Inspector
Unit No. 01 San Joaquin River							Left	6.26	10/22/2013 10/22/2013		Richard Willoughby
LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.	
	Start	End						Start	End	Photo	
108	3.65	3.65	Earthen Levee	Vegetation	LS	M En	V6 : Landscaping Inspector Comments: Landowner planted cactus on landside toe.	37.904375 ° -121.324615 °	37.904375 ° -121.324615 °	124 Y	
								DWR ID: DWR_RD0524_01_f_2012_124			
109	3.68	3.68	Earthen Levee	Slope Stability	WS	M Ma	S2 : Repair the levee slope damaged by foot traffic and prevent access where possible. Inspector Comments: Landowner cut steps into waterside slope.	37.904113 ° -121.325080 °	37.904113 ° -121.325080 °	58 Y	
								DWR ID: DWR_RD0524_01_s_2012_58			
110	3.80	3.80	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.902645 ° -121.326340 °	37.902645 ° -121.326340 °	927	
								DWR ID: DWR_RD0524_01_s_2012_927			
111	3.82	3.82	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.902417 ° -121.326482 °	37.902417 ° -121.326482 °	59	
								DWR ID: DWR_RD0524_01_s_2012_59			
112	3.82	3.82	Earthen Levee	Encroachments	CR	M En	EQ : Equipment Inspector Comments: Landowner installed water filter piping system without permit.	37.902365 ° -121.326453 °	37.902365 ° -121.326453 °	266 Y	
								DWR ID: DWR_RD0524_01_s_2012_266			
113	3.84	3.85	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.902155 ° -121.326523 °	37.902002 ° -121.326550 °	928	
								DWR ID: DWR_RD0524_01_s_2012_928			
114	3.89	4.01	Earthen Levee	Encroachments	LS	M En	EQ : Equipment	37.901375 ° -121.326507 °	37.899745 ° -121.326630 °	62 Y	
								DWR ID: DWR_RD0524_01_s_2012_62			
115	3.91	3.94	Earthen Levee	Encroachments	LS	U En	EQ : Equipment Inspector Comments: Landowner is storing equipment on landward shoulder and landward toe.	37.901147 ° -121.326453 °	37.900735 ° -121.326425 °	95 Y	
								DWR ID: DWR_RD0524_01_f_2013_95			
116	3.92	3.92	Earthen Levee	Vegetation	WS	M Ma	V2 : Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Remove cactus	37.900952 ° -121.326443 °	37.900952 ° -121.326443 °	94 Y	
								DWR ID: DWR_RD0524_01_s_2012_94			
117	3.93	3.93	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.900854 ° -121.326438 °	37.900854 ° -121.326438 °	83	
								DWR ID: DWR_RD0524_01_s_2012_83			
118	4.06	4.06	Earthen Levee	Encroachments	LS	U En	RA : Ramp Inspector Comments: Unauthorized ramp. Ramp does not meet Title 23 standard.	37.899027 ° -121.326982 °	37.899027 ° -121.326982 °	101 Y	
								DWR ID: DWR_RD0524_01_s_2012_101			
119	4.07	4.07	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.898925 ° -121.327015 °	37.898925 ° -121.327015 °	61	
								DWR ID: DWR_RD0524_01_s_2012_61			
120	4.08	4.13	Earthen Levee	Animal Control	LS	M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.898832 ° -121.327092 °	37.898090 ° -121.327457 °	64	
								DWR ID: DWR_RD0524_01_s_2012_64			

* Location		** Rating		+ Issue Type	
LS : Land Side		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 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway					Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River					Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
121	4.13	4.13	Earthen Levee	Slope Stability	LS	M Ma	S1 : Repair slope instability.	37.898035 ° -121.327447 °	37.898035 ° -121.327447 °	108 Y
DWR ID: DWR_RD0524_01_s_2012_108										
122	4.19	4.19	Earthen Levee	Encroachments	LS	C En	PI : Pipe Inspector Comments: Remove old pipes on landside slope.	37.897258 ° -121.327827 °	37.897258 ° -121.327827 °	137 Y
DWR ID: DWR_RD0524_01_s_2013_137										
123	4.19	4.19	Earthen Levee	Encroachments	LS	M En	RA : Ramp Inspector Comments: Two unauthorized ramps on landward slope.	37.897103 ° -121.327895 °	37.897103 ° -121.327895 °	110 Y
DWR ID: DWR_RD0524_01_s_2012_110										
124	4.19	4.19	Interior Drainage & Piping Systems	Metal Pipes	WS	M Ma	Inspector Comments: Landowner has temporarily repaired pipe with tape. Pipe should be replaced to stop further damage to the levee.	37.897113 ° -121.327895 °	37.897113 ° -121.327895 °	109 Y
DWR ID: DWR_RD0524_01_s_2012_109										
125	4.40	4.56	Earthen Levee	Animal Control	LS	M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.894587 ° -121.329253 °	37.892493 ° -121.328267 °	65 Y
DWR ID: DWR_RD0524_01_s_2012_65										
126	4.42	4.42	Earthen Levee	Encroachments	LS	M En	TR : Tree or limb Inspector Comments: Dead tree at landside toe should be removed from levee toe.	37.894258 ° -121.329247 °	37.894258 ° -121.329247 °	111 Y
DWR ID: DWR_RD0524_01_s_2012_111										
127	4.44	4.58	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.893928 ° -121.329203 °	37.892230 ° -121.328187 °	112 Y
DWR ID: DWR_RD0524_01_s_2012_112										
128	4.53	4.54	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 08/13/2013: No significant change observed. 08/07/2012: Erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2013 Site ID:RD0524U01RM45.07]	37.892230 ° -121.327930 °	37.892230 ° -121.327930 °	143 Y
DWR ID:										
129	4.57	4.57	Earthen Levee	Encroachments	WS	M En	PR : Prunings	37.892368 ° -121.328200 °	37.892368 ° -121.328200 °	102 Y
DWR ID: DWR_RD0524_01_s_2012_102										
130	4.64	4.64	Earthen Levee	Encroachments	LS	M Ma	GA : Garbage	37.891365 ° -121.328633 °	37.891365 ° -121.328633 °	66 Y
DWR ID: DWR_RD0524_01_s_2012_66										
131	4.65	4.65	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.891285 ° -121.328728 °	37.891285 ° -121.328728 °	63 Y
DWR ID: DWR_RD0524_01_s_2012_63										
132	4.67	4.67	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.890973 ° -121.328970 °	37.890973 ° -121.328970 °	113 Y
DWR ID: DWR_RD0524_01_s_2012_113										

*** Location**

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A/W : Acceptable but Monitor & Maintain

+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway					Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River					Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
133	4.71	4.71	Supplemental	DWR Erosion Survey	WS	M Ma	Inspector Comments: 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. [2013 Site ID:RD0524U01RM45.27]	37.889809 ° -121.329342 °	37.889809 ° -121.329342 °	144 Y
DWR ID: _____										
134	4.74	4.74	Earthen Levee	Trim / Thin Trees	LS	A/W Ma	T1 : Trim trees to at least five feet above ground level. Inspector Comments: Fig tree at landside toe.	37.890108 ° -121.329523 °	37.890108 ° -121.329523 °	67
DWR ID: DWR_RD0524_01_s_2012_67										
135	4.98	4.98	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.887277 ° -121.331609 °	37.887277 ° -121.331609 °	84
DWR ID: DWR_RD0524_01_s_2012_84										
136	5.01	5.03	Earthen Levee	Vegetation	LS	M Ma	V4 : Elderberries are blocking visibility and flood fight capability.	37.886907 ° -121.331862 °	37.886673 ° -121.331965 °	114
DWR ID: DWR_RD0524_01_s_2012_114										
137	5.11	5.11	Earthen Levee	Trim / Thin Trees	LS	U Ma	T4 : Trim trees over roadway to at least 12 feet above ground level.	37.885400 ° -121.332153 °	37.885400 ° -121.332153 °	68 Y
DWR ID: DWR_RD0524_01_s_2012_68										
138	5.17	5.17	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.884592 ° -121.332168 °	37.884592 ° -121.332168 °	71
DWR ID: DWR_RD0524_01_s_2012_71										
139	5.20	5.20	Earthen Levee	Trim / Thin Trees	LS	M Ma	T4 : Trim trees over roadway to at least 12 feet above ground level.	37.884075 ° -121.332118 °	37.884075 ° -121.332118 °	72
DWR ID: DWR_RD0524_01_s_2012_72										
140	5.24	5.24	Earthen Levee	Slope Stability	LS	M Ma	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible. Inspector Comments: Vehicle traffic created a ramp on landward slope.	37.883587 ° -121.332100 °	37.883587 ° -121.332100 °	115 Y
DWR ID: DWR_RD0524_01_s_2012_115										
141	5.26	5.26	Earthen Levee	Encroachments	WS	M En	TR : Tree or limb Inspector Comments: Dead tree limbs on waterside slope.	37.883170 ° -121.332227 °	37.883170 ° -121.332227 °	116
DWR ID: DWR_RD0524_01_s_2012_116										
142	5.32	5.38	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.882377 ° -121.332598 °	37.881498 ° -121.332800 °	85
DWR ID: DWR_RD0524_01_s_2012_85										
143	5.38	5.38	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 08/13/2013: Erosion seems to be getting worse. More material sloughing visible. 08/07/2012: Erosion is underneath an irrigation pipe. The likely cause of the erosion is the pipe leakage. [2013 Site ID:RD0524U01RM45.97]	37.880320 ° -121.333266 °	37.880320 ° -121.333266 °	147 Y
DWR ID: _____										
144	5.43	5.46	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.880945 ° -121.332837 °	37.880522 ° -121.332918 °	932
DWR ID: DWR_RD0524_01_s_2012_932										

*** Location**

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+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River						Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
145	5.46	5.46	Earthen Levee	Animal Control	LS	M Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	37.880575 ° -121.332890 °	37.880575 ° -121.332890 °	931 Y
DWR ID: DWR_RD0524_01_s_2012_931										
146	5.47	5.47	Earthen Levee	Slope Stability	LS	M Ma	S1 : Repair slope instability. Inspector Comments: Slope damage caused by human activity.	37.880323 ° -121.332968 °	37.880323 ° -121.332968 °	118 Y
DWR ID: DWR_RD0524_01_s_2012_118										
147	5.48	5.48	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.880085 ° -121.333045 °	37.880085 ° -121.333045 °	73 Y
DWR ID: DWR_RD0524_01_s_2012_73										
148	5.57	5.57	Earthen Levee	Trim / Thin Trees	WS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.878918 ° -121.333148 °	37.878918 ° -121.333148 °	96 Y
DWR ID: DWR_RD0524_01_s_2012_96										
149	5.61	5.61	Supplemental	DWR Erosion Survey	WS	M Ma	Inspector Comments: 08/13/2013: Larger trees are at the levee shoulder, and an irrigation pump station is next to the erosion site. [2013 Site ID:RD0524U01RM46.06]	37.878920 ° -121.332670 °	37.878920 ° -121.332670 °	148 Y
DWR ID:										
150	5.65	5.66	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 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 changes observed on site. 09/07/2010: No significant changes 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 changes 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. [2013 Site ID:RD0524U01RM46.12]	37.877880 ° -121.332550 °	37.877880 ° -121.332550 °	145 Y
DWR ID:										
151	5.69	5.69	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.877272 ° -121.332400 °	37.877272 ° -121.332400 °	117 Y
DWR ID: DWR_RD0524_01_f_2013_117										
152	5.84	5.84	Earthen Levee	Encroachments	LS	M Ma	PR : Prunings Inspector Comments: Prunings at landside toe should be burned or removed.	37.875328 ° -121.333050 °	37.875328 ° -121.333050 °	267 Y
DWR ID: DWR_RD0524_01_s_2012_267										

*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
153	5.86	5.86	Supplemental	DWR Erosion Survey	WS	U Ma	Inspector Comments: 08/13/2013: No significant change observed. 08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2013 Site ID:RD0524U01RM46.39]	37.874370 ° -121.332850 °	37.874370 ° -121.332850 °	146 Y
DWR ID: DWR_RD0524_01_s_2012_69										
154	5.86	5.86	Earthen Levee	Animal Control	LS	A/W Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. Inspector Comments: District has grouted rodent holes.	37.877298 ° -121.332343 °	37.875073 ° -121.333168 °	69
DWR ID: DWR_RD0524_01_s_2012_69										
155	5.92	5.94	Earthen Levee	Animal Control	WSA/W	Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. Inspector Comments: District has grouted rodent holes.	37.874240 ° -121.333187 °	37.874002 ° -121.333027 °	75
DWR ID: DWR_RD0524_01_s_2012_75										
156	5.92	5.92	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site.	37.874240 ° -121.333185 °	37.874165 ° -121.333155 °	74 Y
DWR ID: DWR_RD0524_01_s_2012_74										
157	5.93	5.93	Earthen Levee	Slope Stability	LS	U Ma	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible. Inspector Comments: Landowner is using damaged area as a ramp.	37.873893 ° -121.332978 °	37.873893 ° -121.332978 °	119 Y
DWR ID: DWR_RD0524_01_s_2012_119										
158	5.97	5.97	Earthen Levee	Trim / Thin Trees	LS	A/W Ma	T1 : Trim trees to at least five feet above ground level.	37.873678 ° -121.332550 °	37.873678 ° -121.332550 °	86
DWR ID: DWR_RD0524_01_s_2012_86										
159	5.99	6.00	Earthen Levee	Encroachments	LS	M En	FE : Fence	37.873545 ° -121.332308 °	37.873445 ° -121.332127 °	87
DWR ID: DWR_RD0524_01_s_2012_87										
160	5.99	6.00	Earthen Levee	Vegetation	LS	U En	V6 : Landscaping Inspector Comments: Cactus	37.873543 ° -121.332308 °	37.873445 ° -121.332127 °	88 Y
DWR ID: DWR_RD0524_01_s_2012_88										
161	6.01	6.01	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.873347 ° -121.332028 °	37.873347 ° -121.332028 °	120
DWR ID: DWR_RD0524_01_s_2012_120										
162	6.01	6.05	Earthen Levee	Encroachments	LS	U En	BU : Building Inspector Comments: Garbage also located next to abandoned trailer.	37.873377 ° -121.331977 °	37.873102 ° -121.331382 °	89 Y
DWR ID: DWR_RD0524_01_s_2012_89										
163	6.02	6.02	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.873300 ° -121.331928 °	37.873300 ° -121.331928 °	81
DWR ID: DWR_RD0524_01_s_2012_81										
164	6.05	6.05	Earthen Levee	Slope Stability	LS	M Ma	S2 : Repair the levee slope damaged by foot traffic and prevent access where possible. Inspector Comments: Landowner cut steps into landside slope.	37.873047 ° -121.331408 °	37.873047 ° -121.331408 °	933 Y
DWR ID: DWR_RD0524_01_s_2012_933										

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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River						Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
165	6.21	6.21	Earthen Levee	Encroachments	WS	M Ma	PI : Pipe Inspector Comments: Open abandoned 10" pipe on waterside slope below flood elevation. Pipe should be removed or properly abandoned.	37.871137 ° -121.330138 °	37.871137 ° -121.330138 °	268 Y
DWR ID: DWR_RD0524_01_s_2012_268										
166	6.23	6.23	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.870842 ° -121.330000 °	37.870842 ° -121.330000 °	98
DWR ID: DWR_RD0524_01_s_2012_98										
167	6.23	6.23	Earthen Levee	Vegetation	LS A/W	V2 Ma	Remove the wild growth other than native grasses from the levee slopes.	37.870840 ° -121.329993 °	37.870840 ° -121.329993 °	97
DWR ID: DWR_RD0524_01_s_2012_97										

*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	4
Start Levee Mile	0.18
End Levee Mile	0.18
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of erosion.

SJR2013_RD0524U01RM40.85_2.jpg



Levee Mile Report Line	5
Start Levee Mile	0.22
End Levee Mile	0.22
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting

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

richard_f_20130930_783.jpg



Levee Mile Report Line	5
Start Levee Mile	0.22
End Levee Mile	0.22
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting

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

richard_f_20130930_784.jpg



*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	5
Start Levee Mile	0.22
End Levee Mile	0.22
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting

Looking west at depression on levee crown near waterward shoulder.

richard_f_20131024_123.JPG



Levee Mile Report Line	6
Start Levee Mile	0.36
End Levee Mile	0.36
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Garbage pile at landward toe at LM 0.36.

richard_f_20130930_800.jpg



Levee Mile Report Line	7
Start Levee Mile	0.40
End Levee Mile	0.40
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of erosion site. Note the vegetation at the levee toe and lower slope.

SJR2013_RD0524U01RM40.99_1.jpg



*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	9
Start Levee Mile	0.63
End Levee Mile	0.63
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

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

richard_f_20130930_789.jpg



Levee Mile Report Line	10
Start Levee Mile	0.63
End Levee Mile	0.64
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at bamboo on waterside slope. (Spring 2012)

richard_f_20130930_790.jpg



Levee Mile Report Line	10
Start Levee Mile	0.63
End Levee Mile	0.64
Location	Water Side
Category	Earthen Levee
Item	Vegetation

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

richard_f_20130930_791.JPG



*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	10
Start Levee Mile	0.63
End Levee Mile	0.64
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking south at dying bamboo on waterward slope. (Spring 2013)

richard_f_20130930_792.JPG



Levee Mile Report Line	11
Start Levee Mile	0.65
End Levee Mile	0.66
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Erosion from LM 0.65 to 0.66

richard_f_20130930_794.jpg



Levee Mile Report Line	11
Start Levee Mile	0.65
End Levee Mile	0.66
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Update of erosion site at LM 0.65 to 0.66

richard_f_20130930_795.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	11
Start Levee Mile	0.65
End Levee Mile	0.66
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Looking south at erosion on waterside shoulder.

richard_f_20130930_796.jpg



Levee Mile Report Line	12
Start Levee Mile	0.68
End Levee Mile	0.68
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at bamboo on waterside shoulder as of 4/2010.

richard_f_20130930_797.jpg



Levee Mile Report Line	12
Start Levee Mile	0.68
End Levee Mile	0.68
Location	Water Side
Category	Earthen Levee
Item	Vegetation

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

richard_f_20130930_798.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	12
Start Levee Mile	0.68
End Levee Mile	0.68
Location	Water Side
Category	Earthen Levee
Item	Vegetation
Looking south at dying bamboo on waterward slope. (Spring 2013)	
richard_f_20130930_799.JPG	



Levee Mile Report Line	13
Start Levee Mile	0.77
End Levee Mile	0.78
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey
Upstream view of the erosion site.	
SJR2013_RD0524U01RM41.39_1.jpg	



Levee Mile Report Line	14
Start Levee Mile	0.78
End Levee Mile	0.78
Location	Land Side
Category	Earthen Levee
Item	Vegetation
Looking west at dense vegetation on landside toe.	
richard_f_20130930_908.jpg	

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	14
Start Levee Mile	0.78
End Levee Mile	0.78
Location	Land Side
Category	Earthen Levee
Item	Vegetation

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

richard_f_20130930_909.JPG



Levee Mile Report Line	15
Start Levee Mile	0.79
End Levee Mile	0.79
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking southwest at low hanging tree branches at landside toe.

richard_f_20130930_856.jpg



Levee Mile Report Line	16
Start Levee Mile	0.82
End Levee Mile	0.82
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southwest at hole on landward shoulder.

richard_f_20131024_131.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
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N : Not Inspected/Rated
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	16
Start Levee Mile	0.82
End Levee Mile	0.82
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking west at hole on landward shoulder.

richard_f_20131030_132.JPG



Levee Mile Report Line	16
Start Levee Mile	0.82
End Levee Mile	0.82
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking northeast at several finger erosion on landward slope.

richard_f_20131030_133.JPG



Levee Mile Report Line	16
Start Levee Mile	0.82
End Levee Mile	0.82
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking east at erosion on landward slope.

richard_f_20131030_134.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	16
Start Levee Mile	0.82
End Levee Mile	0.82
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southeast at finger erosion on landward slope.

richard_f_20131030_135.JPG



Levee Mile Report Line	17
Start Levee Mile	0.83
End Levee Mile	0.84
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

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

SJR2013_RD0524U01RM41.44_1.jpg



Levee Mile Report Line	18
Start Levee Mile	0.91
End Levee Mile	0.91
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

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

SJR2013_RD0524U01RM41.5_1.jpg



*** Location**

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CR : Crown

**** Rating**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	19
Start Levee Mile	0.92
End Levee Mile	0.92
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking northwest at inch and half metal pipe on waterward slope.

richard_f_20130930_893.JPG



Levee Mile Report Line	20
Start Levee Mile	0.94
End Levee Mile	1.02
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking south at low hanging tree branches at landside toe.

richard_f_20130930_857.jpg



Levee Mile Report Line	23
Start Levee Mile	1.00
End Levee Mile	1.00
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of erosion.

SJR2013_RD0524U01RM41.58_1.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

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A/W : Acceptable but Monitor & Maintain

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	24
Start Levee Mile	1.03
End Levee Mile	1.03
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking upstream (south) at erosion site.

richard_f_20130930_801.jpg



Levee Mile Report Line	24
Start Levee Mile	1.03
End Levee Mile	1.03
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking north at erosion site next to repaired site.
(Spring 2012)

richard_f_20130930_802.jpg



Levee Mile Report Line	24
Start Levee Mile	1.03
End Levee Mile	1.03
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southeast at erosion next to repaired site
on waterward slope (Spring 2013)

richard_f_20130930_803.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	25
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Landward slope damage at LM 1.09.

richard_f_20130930_804.jpg



Levee Mile Report Line	25
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Updated picture of the erosion site on the landside shoulder.

richard_f_20130930_805.jpg



Levee Mile Report Line	25
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Updated view from above the slope stability.

richard_f_20130930_806.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	25
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking at updated slope stability as of 4/2010.

richard_f_20130930_807.jpg



Levee Mile Report Line	25
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking south at caving on landside shoulder.
(Spring 2012)

richard_f_20130930_808.jpg



Levee Mile Report Line	26
Start Levee Mile	1.14
End Levee Mile	1.17
Location	Water Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking northwest at low hanging tree branches
at waterside toe.

richard_f_20130930_809.jpg



*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	27
Start Levee Mile	1.16
End Levee Mile	1.24
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Direct view of the site.

SJR2013_RD0524U01RM41.79_1.jpg



Levee Mile Report Line	28
Start Levee Mile	1.17
End Levee Mile	1.25
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at dense veg. on landside toe.

richard_f_20130930_917.jpg



Levee Mile Report Line	29
Start Levee Mile	1.26
End Levee Mile	1.26
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking south at unauthorized ramp on landside slope.

richard_f_20130930_910.jpg



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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	29
Start Levee Mile	1.26
End Levee Mile	1.26
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking northwest at unauthorized ramp on landside slope.

richard_f_20130930_911.jpg



Levee Mile Report Line	30
Start Levee Mile	1.29
End Levee Mile	1.32
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion.

SJR2013_RD0524U01RM41.92_3.jpg



Levee Mile Report Line	31
Start Levee Mile	1.31
End Levee Mile	1.31
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking north at broken pipe.

richard_f_20130930_819.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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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 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	31
Start Levee Mile	1.31
End Levee Mile	1.31
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking west at pipe on landside slope.

richard_f_20130930_820.jpg



Levee Mile Report Line	33
Start Levee Mile	1.39
End Levee Mile	1.39
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion.

SJR2013_RD0524U01RM42.03_2.jpg



Levee Mile Report Line	34
Start Levee Mile	1.45
End Levee Mile	1.47
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of erosion site.

SJR2013_RD0524U01RM42.09_1.jpg



*** Location**

LS : Land Side
WS : Water Side
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A/W : Acceptable but Monitor & Maintain

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Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	35
Start Levee Mile	1.51
End Levee Mile	1.51
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Dense vegetation on landside toe.

richard_f_20130930_918.jpg



Levee Mile Report Line	35
Start Levee Mile	1.51
End Levee Mile	1.51
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking south at dense veg. on landside slope and toe.

richard_f_20130930_919.jpg



Levee Mile Report Line	35
Start Levee Mile	1.51
End Levee Mile	1.51
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking south at trees on landside slope. (Fall 2012)

richard_f_20130930_920.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
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U : Unacceptable
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A/W : Acceptable but Monitor & Maintain

+ Issue Type

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Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	36
Start Levee Mile	1.56
End Levee Mile	1.74
Location	Land Side
Category	Earthen Levee
Item	Vegetation
Overgrown landscaping on landward slope from LM 1.56 to 1.74	
richard_f_20130930_810.jpg	



Levee Mile Report Line	37
Start Levee Mile	1.58
End Levee Mile	1.64
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey
Front view of erosion. Dense vegetation is visible.	
SJR2013_RD0524U01RM42.2_3.jpg	



Levee Mile Report Line	38
Start Levee Mile	1.60
End Levee Mile	1.60
Location	Crown
Category	Earthen Levee
Item	Slope Stability
Looking south at depression on levee crown near waterward shoulder.	
richard_f_20131024_124.JPG	

*** Location**

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WS : Water Side
CR : Crown

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	39
Start Levee Mile	1.62
End Levee Mile	1.63
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking north at dense vegetation on the landside and waterside slopes.

richard_f_20130930_811.jpg



Levee Mile Report Line	40
Start Levee Mile	1.62
End Levee Mile	1.63
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at dense vegetation on the waterside slope.

richard_f_20130930_812.jpg



Levee Mile Report Line	42
Start Levee Mile	1.64
End Levee Mile	1.64
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking east at non-permitted boat dock.

richard_f_20130930_830.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	42
Start Levee Mile	1.64
End Levee Mile	1.64
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking at garbage on waterside slope.

richard_f_20130930_831.jpg



Levee Mile Report Line	44
Start Levee Mile	1.69
End Levee Mile	1.69
Location	Water Side
Category	Earthen Levee
Item	Encroachments

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

richard_f_20130930_835.jpg



Levee Mile Report Line	44
Start Levee Mile	1.69
End Levee Mile	1.69
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking west at concrete stairs on waterside slope.

richard_f_20130930_836.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	44
Start Levee Mile	1.69
End Levee Mile	1.69
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at retaning wall connected to concrete stairs.

richard_f_20130930_837.jpg



Levee Mile Report Line	46
Start Levee Mile	1.75
End Levee Mile	1.75
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at garbage pile on landside toe. (Spring 2012)

richard_f_20130930_813.jpg



Levee Mile Report Line	46
Start Levee Mile	1.75
End Levee Mile	1.75
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at burned pruning pile on landside slope.

richard_f_20130930_814.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	47
Start Levee Mile	1.77
End Levee Mile	1.77
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

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

richard_f_20130930_838.jpg



Levee Mile Report Line	48
Start Levee Mile	1.80
End Levee Mile	1.80
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at prunings on landside toe.

richard_f_20130930_874.jpg



Levee Mile Report Line	49
Start Levee Mile	1.82
End Levee Mile	1.82
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking west at garbage and equipment at landside toe.

richard_f_20130930_877.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	50
Start Levee Mile	1.90
End Levee Mile	1.95
Location	Land Side
Category	Earthen Levee
Item	Vegetation

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

richard_f_20130930_858.jpg



Levee Mile Report Line	51
Start Levee Mile	1.95
End Levee Mile	1.95
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at bamboo on waterside slope.

richard_f_20130930_878.jpg



Levee Mile Report Line	51
Start Levee Mile	1.95
End Levee Mile	1.95
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking northeast at sprayed bamboo on waterside slope. (Fall 2012)

richard_f_20130930_879.JPG



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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	53
Start Levee Mile	2.01
End Levee Mile	2.01
Location	Land Side
Category	Earthen Levee
Item	Encroachments

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

richard_f_20130930_785.JPG



Levee Mile Report Line	57
Start Levee Mile	2.19
End Levee Mile	2.19
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Looking from downstream.

SJR2013_RD0524U01RM42.79_1.jpg



Levee Mile Report Line	58
Start Levee Mile	2.22
End Levee Mile	2.28
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Looking south slope damage on waterward shoulder and slope.

richard_f_20130930_817.JPG



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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	59
Start Levee Mile	2.25
End Levee Mile	2.28
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Looking from upstream.

SJR2013_RD0524U01RM42.84_1.jpg



Levee Mile Report Line	60
Start Levee Mile	2.29
End Levee Mile	2.31
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at dense veg on landside slope and toe.

richard_f_20130930_818.jpg



Levee Mile Report Line	61
Start Levee Mile	2.31
End Levee Mile	2.33
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Looking from upstream.

SJR2013_RD0524U01RM42.93_1.jpg



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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	62
Start Levee Mile	2.34
End Levee Mile	2.35
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

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

richard_f_20130930_821.JPG



Levee Mile Report Line	64
Start Levee Mile	2.44
End Levee Mile	2.48
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at dense vegetation on landward toe.

richard_f_20130930_822.JPG



Levee Mile Report Line	65
Start Levee Mile	2.46
End Levee Mile	2.50
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking east at erosion on waterside slope.

richard_f_20130930_823.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
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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 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	66
Start Levee Mile	2.48
End Levee Mile	2.48
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking southwest at dense vegetation on landside toe.

richard_f_20130930_861.jpg



Levee Mile Report Line	66
Start Levee Mile	2.48
End Levee Mile	2.48
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking southwest at dense vegetation and trees on landside slope. (Fall 2012)

richard_f_20130930_862.JPG



Levee Mile Report Line	67
Start Levee Mile	2.52
End Levee Mile	2.52
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at elderberry on landside slope.

richard_f_20130930_824.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
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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 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	67
Start Levee Mile	2.52
End Levee Mile	2.52
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at trees along levee landside toe.

richard_f_20130930_825.jpg



Levee Mile Report Line	67
Start Levee Mile	2.52
End Levee Mile	2.52
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking north at elderberry and trees on landside slope.

richard_f_20130930_826.jpg



Levee Mile Report Line	67
Start Levee Mile	2.52
End Levee Mile	2.52
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at dense vegetation on landside toe.

richard_f_20130930_827.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	68
Start Levee Mile	2.53
End Levee Mile	2.53
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking south at elderberry on waterside slope.

richard_f_20130930_828.jpg



Levee Mile Report Line	68
Start Levee Mile	2.53
End Levee Mile	2.53
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking north at elderberry on waterside slope.

richard_f_20130930_829.jpg



Levee Mile Report Line	72
Start Levee Mile	2.59
End Levee Mile	2.59
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking at animal pens on landside slope and toe.

richard_f_20130930_832.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	72
Start Levee Mile	2.59
End Levee Mile	2.59
Location	Water Side
Category	Earthen Levee
Item	Encroachments

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

richard_f_20130930_833.JPG



Levee Mile Report Line	73
Start Levee Mile	2.59
End Levee Mile	2.59
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking southeast at unauthorized ramp on
waterside slope.

richard_f_20130930_788.JPG



Levee Mile Report Line	74
Start Levee Mile	2.60
End Levee Mile	2.60
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking northwest at fence poles on landside
shoulder.

richard_f_20130930_793.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	77
Start Levee Mile	2.65
End Levee Mile	2.65
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Upstream view of erosion. Levee slope protection present upstream of the site.

SJR2013_RD0524U01RM43.23_1.jpg



Levee Mile Report Line	80
Start Levee Mile	2.67
End Levee Mile	2.67
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking southeast at unauthorized ramp on waterside slope.

richard_f_20130930_921.jpg



Levee Mile Report Line	82
Start Levee Mile	2.69
End Levee Mile	2.80
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking north at dense trees overhanging levee crown.

richard_f_20130930_834.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
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N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	83
Start Levee Mile	2.71
End Levee Mile	2.71
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking east at erosion around irrigation pipe on waterward slope.

richard_f_20131024_125.JPG



Levee Mile Report Line	83
Start Levee Mile	2.71
End Levee Mile	2.71
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking at erosion around irrigation pipe on waterward slope.

richard_f_20131024_126.JPG



Levee Mile Report Line	88
Start Levee Mile	2.82
End Levee Mile	2.82
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at elderberry on landside slope.(Spring 2011)

richard_f_20130930_841.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	88
Start Levee Mile	2.82
End Levee Mile	2.82
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at dense elderberry on landside slope.(Spring 2012)

richard_f_20130930_842.jpg



Levee Mile Report Line	89
Start Levee Mile	2.83
End Levee Mile	2.83
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking southwest at dense vegetation on landside slope.

richard_f_20130930_869.JPG



Levee Mile Report Line	90
Start Levee Mile	2.88
End Levee Mile	2.88
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking northwest at elderberry on landside slope.

richard_f_20130930_843.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	91
Start Levee Mile	2.93
End Levee Mile	2.95
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at prunings on landside slope.

richard_f_20130930_844.jpg



Levee Mile Report Line	93
Start Levee Mile	2.96
End Levee Mile	2.96
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of erosion.

SJR2013_RD0524U01RM43.52_1.jpg



Levee Mile Report Line	97
Start Levee Mile	3.29
End Levee Mile	3.31
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of erosion.

SJR2013_RD0524U01RM43.86_2.jpg



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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	100
Start Levee Mile	3.38
End Levee Mile	3.39
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at dense landscaping on landside slope.

richard_f_20130930_870.jpg



Levee Mile Report Line	102
Start Levee Mile	3.43
End Levee Mile	3.49
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking northwest at dense vegetation on landside slope.

richard_f_20130930_845.jpg



Levee Mile Report Line	103
Start Levee Mile	3.45
End Levee Mile	3.45
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at concrete pipes on landside toe.

richard_f_20130930_847.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
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N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	104
Start Levee Mile	3.47
End Levee Mile	3.47
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking northwest at low hanging tree branches on landside slope and toe.

richard_f_20130930_871.jpg



Levee Mile Report Line	105
Start Levee Mile	3.53
End Levee Mile	3.53
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southeast at unauthorized ramp on landside slope and toe.

richard_f_20130930_912.JPG



Levee Mile Report Line	107
Start Levee Mile	3.55
End Levee Mile	3.58
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of erosion.

SJR2013_RD0524U01RM44.13_2.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	108
Start Levee Mile	3.65
End Levee Mile	3.65
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking west at cactus on landside toe.

richard_f_20130930_894.JPG



Levee Mile Report Line	109
Start Levee Mile	3.68
End Levee Mile	3.68
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Looking southeast steps cut into waterside slope.

richard_f_20130930_848.jpg



Levee Mile Report Line	112
Start Levee Mile	3.82
End Levee Mile	3.82
Location	Crown
Category	Earthen Levee
Item	Encroachments

Looking south at unauthorized irrigation pipe across levee and water filtration system at landside toe.

richard_f_20130930_913.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	112
Start Levee Mile	3.82
End Levee Mile	3.82
Location	Crown
Category	Earthen Levee
Item	Encroachments

Looking west at water filtration system on landside toe.

richard_f_20130930_914.jpg



Levee Mile Report Line	112
Start Levee Mile	3.82
End Levee Mile	3.82
Location	Crown
Category	Earthen Levee
Item	Encroachments

Looking south unauthorized pvc irrigation pipe across the levee crown.

richard_f_20130930_915.jpg



Levee Mile Report Line	114
Start Levee Mile	3.89
End Levee Mile	4.01
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking upstream at equipment on landside shoulder

richard_f_20130930_849.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	114
Start Levee Mile	3.89
End Levee Mile	4.01
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking south at northend of equipment stored at landward slope and toe.

richard_f_20130930_850.JPG



Levee Mile Report Line	115
Start Levee Mile	3.91
End Levee Mile	3.94
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking south at farm equipment stored on landward shoulder and toe.

richard_f_20131024_127.JPG



Levee Mile Report Line	115
Start Levee Mile	3.91
End Levee Mile	3.94
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking west at farm equipment stored at landward toe.

richard_f_20131024_128.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
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N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	115
Start Levee Mile	3.91
End Levee Mile	3.94
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking north at farm equipment stored on landward shoulder.

richard_f_20131024_129.JPG



Levee Mile Report Line	116
Start Levee Mile	3.92
End Levee Mile	3.92
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at cactus on waterside slope.

richard_f_20130930_872.jpg



Levee Mile Report Line	118
Start Levee Mile	4.06
End Levee Mile	4.06
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking west at unauthorized ramp on landside slope.

richard_f_20130930_875.jpg



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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	121
Start Levee Mile	4.13
End Levee Mile	4.13
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking southwest at caving slope on landside of levee.

richard_f_20130930_880.jpg



Levee Mile Report Line	123
Start Levee Mile	4.19
End Levee Mile	4.19
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at an unauthorized ramp on landside slope.

richard_f_20130930_885.jpg



Levee Mile Report Line	124
Start Levee Mile	4.19
End Levee Mile	4.19
Location	Water Side
Category	Interior Drainage & Piping Systems
Item	Metal Pipes

Looking east at damaged pipe on waterside slope. (Spring 2012)

richard_f_20130930_881.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	124
Start Levee Mile	4.19
End Levee Mile	4.19
Location	Water Side
Category	Interior Drainage & Piping Systems
Item	Metal Pipes

Looking east at irrigation system damaging waterside toe.

richard_f_20130930_882.jpg



Levee Mile Report Line	124
Start Levee Mile	4.19
End Levee Mile	4.19
Location	Water Side
Category	Interior Drainage & Piping Systems
Item	Metal Pipes

Looking east at irrigation system on waterside slope.

richard_f_20130930_883.jpg



Levee Mile Report Line	124
Start Levee Mile	4.19
End Levee Mile	4.19
Location	Water Side
Category	Interior Drainage & Piping Systems
Item	Metal Pipes

Looking northeast at overview of irrigation system on waterside slope.

richard_f_20130930_884.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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

+ Issue Type

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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	126
Start Levee Mile	4.42
End Levee Mile	4.42
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking west at dead tree at landside toe.

richard_f_20130930_886.jpg



Levee Mile Report Line	128
Start Levee Mile	4.53
End Levee Mile	4.54
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Upstream view of erosion site.

SJR2013_RD0524U01RM45.07_1.jpg



Levee Mile Report Line	129
Start Levee Mile	4.57
End Levee Mile	4.57
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking southeast at dead tree on waterside slope.

richard_f_20130930_876.JPG



*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	130
Start Levee Mile	4.64
End Levee Mile	4.64
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Garbage at landward toe next to ramp at LM 4.64

richard_f_20130930_852.jpg



Levee Mile Report Line	131
Start Levee Mile	4.65
End Levee Mile	4.65
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking south at dense trees on landside slope.

richard_f_20130930_851.jpg



Levee Mile Report Line	132
Start Levee Mile	4.67
End Levee Mile	4.67
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking north at dense trees on landside slope.

richard_f_20130930_887.jpg



*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	133
Start Levee Mile	4.71
End Levee Mile	4.71
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion.

SJR2013_RD0524U01RM45.27_2.jpg



Levee Mile Report Line	137
Start Levee Mile	5.11
End Levee Mile	5.11
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking south at overhanging trees.

richard_f_20130930_853.jpg



Levee Mile Report Line	140
Start Levee Mile	5.24
End Levee Mile	5.24
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking northwest at slope damage on landward slope.

richard_f_20131024_130.JPG



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

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	143
Start Levee Mile	5.38
End Levee Mile	5.38
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the site.

SJR2013_RD0524U01RM45.97_2.jpg



Levee Mile Report Line	146
Start Levee Mile	5.47
End Levee Mile	5.47
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking west at slope damage on landside slope.

richard_f_20130930_888.jpg



Levee Mile Report Line	146
Start Levee Mile	5.47
End Levee Mile	5.47
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking east at slope caving on landside slope.

richard_f_20130930_889.jpg



*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	146
Start Levee Mile	5.47
End Levee Mile	5.47
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking southeast at damaged slope.

richard_f_20130930_890.jpg



Levee Mile Report Line	149
Start Levee Mile	5.61
End Levee Mile	5.61
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion.

SJR2013_RD0524U01RM46.06_1.jpg



Levee Mile Report Line	150
Start Levee Mile	5.65
End Levee Mile	5.66
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Sloughing rip rap adjacent to Howard Bridge.

SJR2013_RD0524U01RM46.12_2.jpg



*** Location**

LS : Land Side
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CR : Crown

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	153
Start Levee Mile	5.86
End Levee Mile	5.86
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Closer view of the erosion.

SJR2013_RD0524U01RM46.39_3.jpg



Levee Mile Report Line	156
Start Levee Mile	5.92
End Levee Mile	5.92
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Erosion at waterward toe and around irrigation pipe at LM 5.92

richard_f_20130930_854.jpg



Levee Mile Report Line	156
Start Levee Mile	5.92
End Levee Mile	5.92
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southeast at erosion around pipe.

richard_f_20130930_855.jpg



*** Location**

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	157
Start Levee Mile	5.93
End Levee Mile	5.93
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking southwest at damaged slope and ramp on landside slope.

richard_f_20130930_891.jpg



Levee Mile Report Line	157
Start Levee Mile	5.93
End Levee Mile	5.93
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking west at unauthorized ramp and landside slope damage.

richard_f_20130930_892.jpg



Levee Mile Report Line	160
Start Levee Mile	5.99
End Levee Mile	6.00
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at fence and cactus on landside slope and toe.

richard_f_20130930_863.jpg



*** Location**

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CR : Crown

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	162
Start Levee Mile	6.01
End Levee Mile	6.05
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking downstream at building on landside toe.

richard_f_20130930_864.jpg



Levee Mile Report Line	162
Start Levee Mile	6.01
End Levee Mile	6.05
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking west at garbage on landside toe next to abandoned trailer.

richard_f_20130930_865.jpg



Levee Mile Report Line	164
Start Levee Mile	6.05
End Levee Mile	6.05
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking north at steps cut into landward slope.

richard_f_20130930_923.JPG



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/22/2013 10/22/2013	Richard Willoughby

Levee Mile Report Line	165
Start Levee Mile	6.21
End Levee Mile	6.21
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking southeast at abandoned pipe on waterside slope.

richard_f_20130930_916.jpg



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