

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2014 Levee Inspection Results

Reclamation District No. 1601 Twitchell

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

** 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

Spring 2014 Levee Inspection Results

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles
Unit No. 01 Threemile Slough	Left	2.47

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	03/06/2014 - 03/06/2014			
DWR Inspector	Richard Willoughby			
Accompanied By				

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
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Levee Inspection Report By Mile - Spring 2014

Reclamation District No. 1601 Twitchell

Waterway		Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough		Left	2.47	03/06/2014 03/06/2014	Richard Willoughby

LM Start	0.00	Rating **	A	Issue No.	6
LM End	0.00	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD1601_01_s_2013_6				
Action/Comments					

No Photos

LM Start	0.00	Rating **	A	Issue No.	7
LM End	0.00	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD1601_01_s_2013_7				
Action/Comments					

No Photos

LM Start	0.00	Rating **	A	Issue No.	8
LM End	0.00	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD1601_01_s_2013_8				
Action/Comments					

No Photos

* 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
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Levee Inspection Report By Mile - Spring 2014

Reclamation District No. 1601 Twitchell

Waterway			Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough			Left	2.47	03/06/2014 03/06/2014	Richard Willoughby

LM Start	0.00	Rating **	A	Issue No.	5
LM End	2.47	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation			°	°
				°	°
DWR ID	DWR_RD1601_01_s_2014_5				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	0.00	Rating **	A	Issue No.	9
LM End	2.47	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation			°	°
				°	°
DWR ID	DWR_RD1601_01_s_2014_9				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

<p>* Location LS : Land Side WS : Water Side CR : Crown</p>	<p>** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain</p>	<p>+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement</p>
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Levee Inspection Report By Mile - Spring 2014

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	03/06/2014 03/06/2014	Richard Willoughby

LM Start	0.11	Rating **	M	Issue No.	1
LM End	0.11	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.120716 °	38.120716 °
				-121.682796 °	-121.682796 °
DWR ID	DWR_RD1601_01_s_2014_1				
Action/Comments					
Inspector Comments: FS_ID:22043 EP_NO: 11227 Repair Type: Crossing Status: UCIP Comments: Appears this crossing might be been recently modified--exposed section of pipe is protected with white paint. Need to contact owner to obtain records. Recommend clearing vegetation along the pipe alignment. FIELD_STRUCT_DESC: 14-inch pipe (not 12-inch pipe as original description noted) through the levee, 4.0 feet below the crown. Siphon primer on waterward shoulder. 36-inch steel (not concrete as original description noted) pipe with shut-off valve inside at landward toe ditch. (ABO No. 11227-1975) FS Date: 5/14/2013					

Photo 1 of 1 : UCIP_2791.jpg



View of waterward side. 12-inch pipe to the right and 14-inch pipe to the left.

* 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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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	03/06/2014 03/06/2014	Richard Willoughby

LM Start	0.11	Rating **	M	Issue No.	2
LM End	0.11	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.120708 °	38.120708 °
				-121.682798 °	-121.682798 °
DWR ID	DWR_RD1601_01_s_2014_2				
Action/Comments					
Inspector Comments: FS_ID:22044 EP_NO: N/A Repair Type: Crossing Status: UCIP Comments: Appears this crossing might be been recently modified O&M manual calls for 8 inch pipe not 12 inch pipe, need additional information--exposed section of pipe is protected with white paint. Need to contact owner to obtain records. Recommend clearing vegetation along the pipe alignment. FIELD_STRUCT_DESC: 12-inch (not 8 inch listed in USACE) siphon through the levee approximately 3.2 feet below the crown. The existing 8-inch pipe listed in the O&M manual is no longer present at LM 0.1 (USACE-1959), no permit was found authorizing crossing modifications. FS Date: 5/14/2013					

No Photos

LM Start	0.18	Rating **	M	Issue No.	3
LM End	0.18	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.119698 °	38.119698 °
				-121.682760 °	-121.682760 °
DWR ID	DWR_RD1601_01_s_2013_3				
Action/Comments					
Note and monitor erosion site. Inspector Comments: District repaired site.					

Photo 1 of 5 : richard_s_20140227_059.jpg



Looking northwest at erosion on waterside toe.

* 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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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	03/06/2014 03/06/2014	Richard Willoughby

LM Start	0.18	Rating **	M	Issue No.	3 (cont)
LM End	0.18	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.119698 °	38.119698 °
				-121.682760 °	-121.682760 °
DWR ID	DWR_RD1601_01_s_2013_3				
Action/Comments					
Note and monitor erosion site.					
Inspector Comments: District repaired site.					

Photo 2 of 5 : richard_s_20140227_060.jpg



Looking southwest at repaired site on waterward slope

LM Start	0.18	Rating **	M	Issue No.	3 (cont)
LM End	0.18	Issue Type +	Ma	Location *	WS

Photo 3 of 5 : richard_s_20140227_061.jpg



Looking northwest at repaired erosion site on waterward slope.

LM Start	0.18	Rating **	M	Issue No.	3 (cont)
LM End	0.18	Issue Type +	Ma	Location *	WS

Photo 4 of 5 : richard_s_20140306_147.jpg



Looking southwest at repaired site on waterward slope.

* 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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Waterway		Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough		Left	2.47	03/06/2014 03/06/2014	Richard Willoughby

LM Start	0.18	Rating **	M	Issue No.	3 (cont)
LM End	0.18	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.119698 °	38.119698 °
				-121.682760 °	-121.682760 °
DWR ID	DWR_RD1601_01_s_2013_3				
Action/Comments					
Note and monitor erosion site.					

Photo 5 of 5 : richard_s_20140306_148.jpg



Looking northwest at repaired site on waterward slope.

LM Start	2.08	Rating **	M	Issue No.	4
LM End	2.08	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.093107 °	38.093107 °
				-121.684525 °	-121.684525 °
DWR ID	DWR_RD1601_01_s_2014_4				
Action/Comments					
Inspector Comments: FS_ID:19545 EP_NO: 2909A Repair Type: Crossing Status: UCIP Comments: Appears this crossing might be been recently modified--exposed section of pipe is protected with white paint. Need to contact owner to obtain records. Recommend clearing vegetation along the pipe alignment. Dense vegetation on landward slope limits the inspector's visibility to identify signs of leaks along levee slope. FIELD_STRUCT_DESC: 8-inch siphon pipe through levee, 2.4 feet below crown. Cutoff wall around pipe at center of levee. Siphon breaker on apex of pipe on landward shoulder. Hand primer pump on landward slope. (Permit No. 2909A-1960) FS Date: 5/14/2013					

Photo 1 of 1 : UCIP_1841.jpg



View of crossing on waterward slope. Rip rap present at waterward toe.

* 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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