

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0070 Meridian

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass	Right	7.92	03/16/2015 03/16/2015	Bob Duffey

LM Start		Rating **	A	Issue No.	12
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Operations & Maintenance Manuals			o	o
DWR ID	DWR_RD0070_01_s_2013_12				
Action/Comments					
Inspector Comments: The LMA has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	13
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Emergency Supplies & Equipment			o	o
DWR ID	DWR_RD0070_01_s_2013_13				
Action/Comments					
Inspector Comments: The LMA has adequate flood fight supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	14
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Flood Preparedness & Training			o	o
DWR ID	DWR_RD0070_01_s_2013_14				
Action/Comments					
Inspector Comments: The LMA completed flood fight training in 2014.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass	Right	7.92	03/16/2015 03/16/2015	Bob Duffey

LM Start	0.46	Rating **	M	Issue No.	11
LM End	0.46	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Erosion / Bank Caving		39.141909 °	39.141909 °	
			-121.840141 °	-121.840141 °	
DWR ID	DWR_RD0070_01_s_2013_11				
Action/Comments					
Note and monitor erosion site.					



View of the erosion along the waterside toe.

LM Start	1.81	Rating **	A/W	Issue No.	33
LM End	1.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		39.151635 °	39.151635 °	
			-121.856550 °	-121.856550 °	
DWR ID	DWR_RD0070_01_f_2014_33				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

LM Start	6.18	Rating **	M	Issue No.	6
LM End	6.18	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Slope Stability		39.187481 °	39.187481 °	
			-121.910852 °	-121.910852 °	
DWR ID	DWR_RD0070_01_s_2012_6				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					



View of vehicle erosion along the waterside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	15.50	03/16/2015 03/16/2015	Bob Duffey

LM Start	0.04	Rating **	M	Issue No.	16
LM End	0.32	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	USACE Erosion Survey		39.193219 °	39.190038 °	
			-121.935783 °	-121.934199 °	
DWR ID	DWR_RD0070_02_f_2014_16				
Action/Comments					
Inspector Comments: 1997 - Loss of cobble revetment in levee section. 2004 - New fresh erosion in a short section of the downstream end. 2010 - New deposition on cobbles. 2013: No observed changes. [2013 Site ID: SAC_138-1_L]					

Photo 1 of 1 : SP_2015_RD0070_30_16_20150310_00014.jpg



USACE 2013 Photo #1

LM Start	1.78	Rating **	M	Issue No.	15
LM End	1.90	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	USACE Erosion Survey		39.173912 °	39.172344 °	
			-121.938745 °	-121.937925 °	
DWR ID	DWR_RD0070_02_f_2014_15				
Action/Comments					
Inspector Comments: 1997 - Toe erosion on a cobble revetment on the outside of a low receding bend. 2012 - Toe appears pretty stable with old cobbles. 2013: No observed changes. [2013 Site ID: SAC_136-6_L]					

Photo 1 of 2 : SP_2015_RD0070_30_15_20150310_00012.jpg



USACE 2013 Photo #1

LM Start	1.78	Rating **	M	Issue No.	15 (cont)
LM End	1.90	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_RD0070_30_15_20150310_00013.jpg



USACE 2013 Photo #2

* 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. 02 Sacramento River	Left	15.50	03/16/2015 03/16/2015	Bob Duffey

LM Start	4.50	Rating **	M	Issue No.	3
LM End	4.54	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		39.141707 °	39.141379 °	
			-121.918480 °	-121.918972 °	
DWR ID	DWR_RD0070_02_s_2012_3				
Action/Comments					
Prunings					

Photo 1 of 1 : SP_2015_RD0070_30_3_20150310_00004.jpg



View of the prunings along the waterside toe.

LM Start	4.57	Rating **	M	Issue No.	770
LM End	4.57	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Erosion / Bank Caving		39.141155 °	39.141155 °	
			-121.919432 °	-121.919432 °	
DWR ID	DWR_RD0070_02_s_2014_770				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					

Photo 1 of 1 : SP_2015_RD0070_30_770_20150310_00020.jpg



View of the damaged ramp along the landside slope.

LM Start	5.04	Rating **	M	Issue No.	18
LM End	5.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		39.142023 °	39.142023 °	
			-121.927828 °	-121.927828 °	
DWR ID	DWR_RD0070_02_s_2012_18				
Action/Comments					
Prunings					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	15.50	03/16/2015 03/16/2015	Bob Duffey

LM Start	6.42	Rating **	M	Issue No.	14
LM End	6.54	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	USACE Erosion Survey		39.132040 °	39.130900 °	
			-121.936521 °	-121.934690 °	
DWR ID	DWR_RD0070_02_f_2014_14				
Action/Comments					
Inspector Comments: 2005 - (known as 132) On inside of bend. Erosion of berm toe. Levee slope is steep. Erosion probably due to eddy scour off upstream cobble. 2009 - Groins may be a good option for repair. 2010 - Scour off the upstream rock, some new erosion. 2011 - Site extended downstream. 2012 - Minor new erosion since last year and new animal holes. 2012 - Minor new erosion since last year and new animal holes. 2013: New tree popout. [2013 Site ID: SAC_131-8_L]					

Photo 1 of 1 : SP_2015_RD0070_30_14_20150310_00011.jpg



USACE 2013 Photo #1

LM Start	8.10	Rating **	M	Issue No.	11
LM End	8.32	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	USACE Erosion Survey		39.122459 °	39.120684 °	
			-121.910121 °	-121.909152 °	
DWR ID	DWR_RD0070_02_f_2014_11				
Action/Comments					
Inspector Comments: 1997 - Critical Site - Erosion of cobble site on outside of a bend. Failure caused by erosion of a material from behind the cobbles and cobbles rolling down the slope. Failure is just above the toe levee. Some repairs had been done at the upstream end. 2004 - Some minor new erosion at the top of the berm. 2005 - Trees look okay and the downstream end has some new rock repair. Site is no longer critical. 2006 - No longer critical, some repairs. 2013: No observed changes. [2013 Site ID: SAC_130-0_L]					

Photo 1 of 1 : SP_2015_RD0070_30_11_20150310_00008.jpg



USACE 2013 Photo #1

LM Start	10.64	Rating **	M	Issue No.	6
LM End	10.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Slope Stability		39.090300 °	39.090300 °	
			-121.893102 °	-121.893102 °	
DWR ID	DWR_RD0070_02_s_2012_6				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : SP_2015_RD0070_30_6_20150310_00005.jpg



View of vehicle erosion along landside slope.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	15.50	03/16/2015 03/16/2015	Bob Duffey

LM Start	11.64	Rating **	M	Issue No.	10
LM End	11.66	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			39.080669 °	39.080621 °
				-121.891164 °	-121.891564 °
DWR ID	DWR_RD0070_02_f_2014_10				
Action/Comments					
Inspector Comments: 2005 - Site was repaired. 2009 - Site is at upstream end of the repair site. 2011 - Still minor erosion. 2012 - Site shortened to remove non-eroding section, minor erosion with failing cobbles. 2013: No observed changes. [2013 Site ID: SAC_125-8_L]					

Photo 1 of 1 : SP_2015_RD0070_30_10_20150310_00007.jpg



USACE 2013 Photo #1

LM Start	14.08	Rating **	M	Issue No.	2
LM End	14.21	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			39.069166 °	39.070105 °
				-121.857995 °	-121.855929 °
DWR ID	DWR_RD0070_02_f_2014_2				
Action/Comments					
Inspector Comments: 2006 - Erosion into the levee toe. Rock at upstream end has poor transition causing eddy scour. 2010 - Minor new erosion. 2011 - Some fresh erosion. 2012 - Additional slumping on the previously slumped bank, site extended downstream. 2013: No observed changes. [2013 Site ID: SAC_123-3_L]					

Photo 1 of 2 : SP_2015_RD0070_30_2_20150310_00002.jpg



USACE 2013 Photo #1

LM Start	14.08	Rating **	M	Issue No.	2 (cont)
LM End	14.21	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_RD0070_30_2_20150310_00003.jpg



USACE 2013 Photo #2

* 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. 02 Sacramento River	Left	15.50	03/16/2015 03/16/2015	Bob Duffey

LM Start	15.41	Rating **	M	Issue No.	37
LM End	15.41	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Erosion / Bank Caving		39.064557 °	39.064557 °	
			-121.838332 °	-121.838332 °	
DWR ID	DWR_RD0070_02_s_2015_37				
Action/Comments					
Note and monitor erosion site. Inspector Comments: Monitor the erosion along the waterside berm.					

Photo 1 of 1 : SP_2015_RD0070_30_37_20150406_00053.jpg



View of the erosion along waterside berm.

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