

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2015 Levee Inspection Results

Reclamation District No. 0108 River Farms

	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 2015 Levee Inspection Results

Reclamation District No. 0108 River Farms

Waterway		Bank	Unit Miles
Unit No. 01 Colusa Basin Drain		Left	20.64
	Spring (March - May)	Summer (June - August)	(September - November) Fall
Unit Maintenance Rating (Fall Only)			Winter (December - February)
Date of Inspection	04/20/2015 - 04/20/2015		
DWR Inspector	Jai Lor		
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
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	04/20/2015 04/20/2015	Jai Lor

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Operations & Maintenance Manuals			o	o
DWR ID	DWR_RD0108_01_s_2013_5				
Action/Comments					
Inspector Comments: RD 108 has levee manuals.					

No Photos

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Emergency Supplies & Equipment			o	o
DWR ID	DWR_RD0108_01_s_2013_7				
Action/Comments					
Inspector Comments: RD 108 maintains a stockpile of flood response materials.					

No Photos

LM Start		Rating **	A	Issue No.	9
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start		End
Item	Flood Preparedness & Training			o	o
DWR ID	DWR_RD0108_01_s_2013_9				
Action/Comments					
Inspector Comments: RD 108 has written response plans and regular flood response training.					

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
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	04/20/2015 04/20/2015	Jai Lor

LM Start	0.08	Rating **	M	Issue No.	1
LM End	0.08	Issue Type +	En	Location *	N/A
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.822897 °	38.822897 °
				-121.797000 °	-121.797000 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:37608 DS_ID:17943 EP_NO: 9396 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to contact owner to determine status of structure. Notes indicate crossing has been abandoned. Owner will need to coordinate with CVFPB and DWR inspector to determine how to properly abandon. FIELD_STRUCT_DESC: 1 of 5. Five 72-inch abandoned pipes or culvert through levee 31.6 feet below crown. Slide gates on both ends. (App. 9736-RD 108) Ramp on landward slope. (App.9396-RD). O&M Manual SAC 132; October 1959 FS Date: 06/10/2014					

No Photos

LM Start	0.08	Rating **	M	Issue No.	2
LM End	0.08	Issue Type +	En	Location *	N/A
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.822919 °	38.822919 °
				-121.797046 °	-121.797046 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:37609 DS_ID:22386 EP_NO: 9396 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to contact owner to determine status of structure. Notes indicate crossing has been abandoned. Owner will need to coordinate with CVFPB and DWR inspector to determine how to properly abandon. FIELD_STRUCT_DESC: 2 of 5. Five 72-inch abandoned pipes or culvert through levee 31.6 feet below crown. Slide gates on both ends. (App. 9736-RD 108) Ramp on landward slope. (App.9396-RD). O&M Manual SAC 132; October 1959 FS Date: 06/10/2014					

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
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	04/20/2015 04/20/2015	Jai Lor

LM Start	0.08	Rating **	M	Issue No.	13
LM End	0.08	Issue Type +	En	Location *	N/A
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.822954 °	38.822954 °
				-121.797135 °	-121.797135 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:37607 DS_ID:22389 EP_NO: 9396 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to contact owner to determine status of structure. Notes indicate crossing has been abandoned. Owner will need to coordinate with CVFPB and DWR inspector to determine how to properly abandon. FIELD_STRUCT_DESC: 5 of 5. Five 72-inch abandoned pipes or culvert through levee 31.6 feet below crown. Slide gates on both ends. (App. 9736-RD 108) Ramp on landward slope. (App.9396-RD). O&M Manual SAC 132; October 1959 FS Date: 06/10/2014					

No Photos

LM Start	0.09	Rating **	M	Issue No.	17
LM End	18.82	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.823146 °	39.012007 °
				-121.797630 °	-121.979559 °
DWR ID	DWR_RD0108_01_s_2015_17				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : SP_2015_RD0108_203_17_20150421_00010.jpg



View of the vegetation on the water ward side of the levee looking upstream. Spring 2015.

* 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
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	04/20/2015 04/20/2015	Jai Lor

LM Start	0.10	Rating **	M	Issue No.	18
LM End	18.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.823147 °	39.012007 °
				-121.797630 °	-121.979559 °
DWR ID	DWR_RD0108_01_s_2015_18				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	2.92	Rating **	M	Issue No.	14
LM End	2.92	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.838696 °	38.838696 °
				-121.845843 °	-121.845843 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:39707 DS_ID:24875 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: No signs of pipe visible--need to contact owner to obtain permit number authorizing work. If crossing is no longer used by owner, the owner will need to coordinate with DWR Inspector and CVFPB to remove crossing according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure. FIELD_STRUCT_DESC: Corrugated Metal (CM) pipe riser located on waterward side. Riser is filled with trash and deris. Unable to determine if crossing exists at this location. FS Date: 03/18/2014					

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
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	04/20/2015 04/20/2015	Jai Lor

LM Start	5.19	Rating **	M	Issue No.	10
LM End	5.19	Issue Type +	En	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		38.846086 °	38.846086 °	
			-121.886834 °	-121.886834 °	
DWR ID	DWR_RD0108_01_s_2014_10				
Action/Comments					
Tree or limb					

Photo 1 of 1 : SP_2015_RD0108_203_10_20150401_00005.jpg



Tree limbs are along the toe of the levee. Tree is slowly dying and could be a hazard to the levee. Spring 2014

LM Start	9.29	Rating **	A/W	Issue No.	279
LM End	9.29	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Slope Stability		38.897452 °	38.897452 °	
			-121.914680 °	-121.914680 °	
DWR ID	DWR_RD0108_01_f_2013_279				
Action/Comments					
Repair slope instability.					

Photo 1 of 2 : SP_2015_RD0108_203_279_20150401_00007.jpg



The cracking runs in a horseshoe pattern on the levee slope. Fall 2013

LM Start	9.29	Rating **	A/W	Issue No.	279 (cont)
LM End	9.29	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_RD0108_203_279_20150401_00008.jpg



Slope stability with cracking 1-2 inches open and 12 inches deep. The district is monitoring the site. Fall 2013

* 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
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	04/20/2015 04/20/2015	Jai Lor

LM Start	11.22	Rating **	M	Issue No.	15
LM End	11.22	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.925662 °	38.925662 °
				-121.914303 °	-121.914303 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:39717 DS_ID:24876 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Need to contact owner to determine additional details					

No Photos

LM Start	14.49	Rating **	M	Issue No.	12
LM End	14.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.967243 °	38.967243 °
				-121.923407 °	-121.923407 °
DWR ID	DWR_RD0108_01_s_2014_12				
Action/Comments					
Schedule repair of subsidence prior to the next inspection.					

Photo 1 of 1 : SP_2015_RD0108_203_12_20150401_00006.jpg



Cracking along the shoulder of the crown. Some slope instability has occurred. Spring 2014

* 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
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	04/20/2015 04/20/2015	Jai Lor

LM Start	19.27	Rating **	M	Issue No.	3
LM End	19.35	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			39.016727 °	39.017516 °
				-121.985411 °	-121.986374 °
DWR ID	DWR_RD0108_01_f_2014_3				
Action/Comments					
Inspector Comments: 2011 - Toe scour at the bottom of a steep bank, large sections of the toe are sliding down. Erosion may be due to the upstream bend. 2013: Site is part of the extended inventory, last inspected 2011. [2013 Site ID: CBD_19-2_L]					

No Photos

LM Start	19.31	Rating **	M	Issue No.	20
LM End	20.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.017271 °	39.033902 °
				-121.985743 °	-121.993271 °
DWR ID	DWR_RD0108_01_s_2015_20				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	19.32	Rating **	M	Issue No.	21
LM End	20.36	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.017389 °	39.031521 °
				-121.985891 °	-121.989919 °
DWR ID	DWR_RD0108_01_s_2015_21				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

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
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2015 Levee Inspection Results

Reclamation District No. 0108 River Farms

Waterway		Bank	Unit Miles
Unit No. 02 Castle Properties		Right	0.28

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	04/20/2015 - 04/20/2015			
DWR Inspector	Jai Lor			
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
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Castle Properties	Right	0.28	04/20/2015 04/20/2015	Jai Lor

LM Start	0.00	Rating **	M	Issue No.	2
LM End	0.26	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.796230 °	38.798919 °	
			-121.727951 °	-121.724733 °	
DWR ID	DWR_RD0108_02_s_2015_2				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	0.09	Rating **	M	Issue No.	1
LM End	0.28	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.797091 °	38.799138 °	
			-121.726729 °	-121.724456 °	
DWR ID	DWR_RD0108_02_s_2015_1				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : SP_2015_RD0108_590_1_20150421_00003.jpg



View of the vegetation on the landward side of the levee looking downstream. Spring 2015.

LM Start	0.17	Rating **	A/W	Issue No.	5
LM End	0.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Cracking		38.797922 °	38.797922 °	
			-121.725865 °	-121.725865 °	
DWR ID	DWR_RD0108_02_s_2015_5				
Action/Comments					
Monitor and have inspected by geotechnical engineer.					

Photo 1 of 1 : SP_2015_RD0108_590_5_20150421_00004.jpg



View of the crack on the landward side of the levee looking downstream. Spring 2015.

* 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 - Spring 2015

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Castle Properties	Right	0.28	04/20/2015 04/20/2015	Jai Lor

LM Start	0.19	Rating **	A/W	Issue No.	4
LM End	0.19	Issue Type +	Ob	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.798196 °	38.798196 °
				-121.725660 °	-121.725660 °
DWR ID	DWR_RD0108_02_f_2012_4				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : SP_2015_RD0108_590_4_20150401_00002.jpg



A couple of rodent holes on the landside slope. Fall 2012

LM Start	0.27	Rating **	A/W	Issue No.	3
LM End	0.27	Issue Type +	Ob	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.798992 °	38.798992 °
				-121.724643 °	-121.724643 °
DWR ID	DWR_RD0108_02_s_2013_3				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : SP_2015_RD0108_590_3_20150401_00001.jpg



No rodents but holes need to be backfilled. Spring 2013

* 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
--	--	---	---