

**Flood Control Project Maintenance
Levee Inspections**

Fall 2012 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

RD2060		Overall LMA Rating	Total LMA Miles						
Reclamation District No. 2060 Hastings		A	15.67						
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	0.11		0.11	0.70%					
Erosion / Bank Caving	0.01		0.01	0.06%					
Cracking							0.03		
Repair Gates	0.01		0.01	0.06%					
Operations & Maintenance Manuals	0.16		0.16	1.02%					
<i>Supplemental</i>									
USACE Erosion Survey	0.66		0.66	4.21%					
<i>LMA Totals:</i>	0.95	0.00	0.95	6.06%	0.00	0.00	0.03	0.00	
Unit No. 01 Lindsey Slough LB		Overall Unit Rating	Total Unit Miles						
RD2060		A	6.94						
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	0.11		0.11	1.59%					
Erosion / Bank Caving	0.01		0.01	0.14%					
Cracking							0.03		
Repair Gates	0.01		0.01	0.14%					
<i>Supplemental</i>									
USACE Erosion Survey	0.02		0.02	0.29%					
<i>Unit Totals:</i>	0.15	0.00	0.15	2.16%	0.00	0.00	0.03	0.00	
Unit No. 02 Ulatis Creek RB		Overall Unit Rating	Total Unit Miles						
RD2060		A	3.70						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence		
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
No Items									
<i>Unit Totals:</i>	0.00	0.00	0.00	0.00%					
Unit No. 03 Cache Slough RB		Overall Unit Rating	Total Unit Miles						
RD2060		M	5.03						
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>Supplemental</i>									
USACE Erosion Survey	0.64		0.64	12.72%					
<i>Unit Totals:</i>	0.64	0.00	0.64	12.72%	0.00	0.00	0.00	0.00	

**Flood Control Project Maintenance
Levee Inspections
LMA District Cover Sheet
Fall 2012 Levee Inspection Results**

Reclamation District No. 2060 Hastings

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

** 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.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2012 Levee Inspection Results

Reclamation District No. 2060 Hastings

Waterway		Bank	Unit Miles
Unit No. 01 Lindsey Slough		Left	6.94

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	03/22/2012 - 03/22/2012		10/04/2012 - 10/04/2012	
DWR Inspector	Herman Phillips		Herman Phillips	
Accompanied By	Mr. Mark Boyd RD 2060 Hastings Tract		Mr. Mark Boyd RD 2060 Hastings Tract	
	Gilbert Casio KSM		Gilbert Casio KSM	

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 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.94	10/04/2012 10/04/2012	Herman Phillips

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1			Earthen Levee	Emergency Supplies & Equipment	WS	A Ma		°	°	10
								DWR ID: DWR_RD2060_01_s_2012_10		
2			Earthen Levee	Operations & Maintenance Manuals	WS	M Ma		°	°	11
								DWR ID: DWR_RD2060_01_s_2012_11		
3			Earthen Levee	Flood Preparedness & Training	WS	A Ma		°	°	12
								DWR ID: DWR_RD2060_01_s_2012_12		
4	0.00	0.00	Earthen Levee	Vegetation	LS	A Ma	V2 : Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Great job maintaining vegetation on slopes.	38.247500 ° -121.696231 °	38.247500 ° -121.696231 °	2 Y
								DWR ID: DWR_RD2060_01_f_2012_2		
5	0.56	0.57	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site. Inspector Comments: District has placed some more rock in this area, they will place more later. 3-08-2011 viewed the erosion site, this site is still active. District say that they will make repairs end of April or May 2011.	38.248630 ° -121.706403 °	38.248617 ° -121.706667 °	14
								DWR ID: DWR_RD2060_01_s_2012_14		
6	1.86	1.86	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2011 - Multiple erosion pockets. Deep cracks throughout site could lead to further bank failure. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: LDS_1-9_L]	38.257517 ° -121.724823 °	38.256535 ° -121.724753 °	4
								DWR ID:		
7	2.44	2.44	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2011 - Two erosion pockets from rotational failures. Very soft soil. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: LDS_2-4_L]	38.257319 ° -121.732423 °	38.257224 ° -121.731953 °	5
								DWR ID:		
8	5.07	5.07	Earthen Levee	Repair Gates	CR	M Ma		38.263157 ° -121.771543 °	38.263157 ° -121.771543 °	6
								DWR ID: DWR_RD2060_01_s_2012_6		
9	5.33	5.36	Earthen Levee	Cracking	WS	M Ob	CR1 : Monitor and have inspected by geotechnical engineer.	38.263314 ° -121.771793 °	38.262140 ° -121.771983 °	3
								DWR ID: DWR_RD2060_01_f_2012_3		
10	5.52	5.63	Earthen Levee	Vegetation	WS	M Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	38.262385 ° -121.777675 °	38.263222 ° -121.779615 °	1
								DWR ID: DWR_RD2060_01_f_2012_1		

* 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 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.94	10/04/2012 10/04/2012	Herman Phillips

Levee Mile Report Line	4
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Land Side
Category	Earthen Levee
Item	Vegetation
RD2060 Unit 1 looking downstream from levee mile 0.00. Photo taken 11-04-2012.	
phillips_f_20121120_398.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**

Unit Cover Sheet

Fall 2012 Levee Inspection Results

Reclamation District No. 2060 Hastings

Waterway		Bank	Unit Miles	
Unit No. 02 Ulatis Creek		Right	3.70	
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	03/22/2012 - 03/22/2012		10/04/2012 - 10/04/2012	
DWR Inspector	Herman Phillips		Herman Phillips	
Accompanied By	Mr. Mark Boyd RD 2060 Hasting Tract		Mr. Mark Boyd RD 2060 Hasting Tract	

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**Flood Control Project Maintenance
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Levee Inspection Report By Mile - Fall 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Ulatis Creek	Right	3.70	10/04/2012 10/04/2012	Herman Phillips

LMIR No.	Levee Mile		Category	Item	* Location	+ Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1	0.00	0.00	Earthen Levee	Vegetation	LS	A	V1 : Control annual grass and weeds on the levee slopes and easements.	38.274777 °	38.274777 °	1
					Ma			-121.794835 °	-121.794835 °	Y

DWR ID: DWR_RD2060_02_f_2012_1

* 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 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Ulatis Creek	Right	3.70	10/04/2012 10/04/2012	Herman Phillips

Levee Mile Report Line	1
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Land Side
Category	Earthen Levee
Item	Vegetation
RD 2060 Unit 2 looking downstream from landside. Photo taken 10-04-2012.	
phillips_f_20121120_396.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**

Unit Cover Sheet

Fall 2012 Levee Inspection Results

Reclamation District No. 2060 Hastings

Waterway		Bank	Unit Miles
Unit No. 03 Cache Slough		Right	5.03
	Spring (March - May)	Summer (June - August)	(September - November) Fall Winter (December - February)
Unit Maintenance Rating (Fall Only)			M
Date of Inspection	03/22/2012 - 03/22/2012		10/04/2012 - 10/04/2012
DWR Inspector	Herman Phillips		Herman Phillips
Accompanied By	Mr. Mark Boyd RD 2060 Hasting Tract		Mr. Mark Boyd RD 2060 Hasting Tract

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**Flood Control Project Maintenance
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Levee Inspection Report By Mile - Fall 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/04/2012 10/04/2012	Herman Phillips

LMIR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1	0.00	0.00	Earthen Levee	Vegetation	LS	A	V2 : Remove the wild growth other than native grasses from the levee slopes.	38.296604 ° -121.748591 °	38.296604 ° -121.748591 °	1 Y
DWR ID: DWR_RD2060_03_f_2012_1										
2	1.55	1.70	Supplemental Survey	USACE Erosion	WS	M	Inspector Comments: Site added in 1997 and removed in 2003. 2005 - Put back in the inventory. 2006 - Stone repair at the middle of the site. 2011 - Some rock place at toe in the past year. 2012: No observed change. [2012 Site ID: CHS_23-6_R]	38.288192 ° -121.724806 °	38.286418 ° -121.723168 °	4 Y
DWR ID:										
3	2.02	2.08	Supplemental Survey	USACE Erosion	WS	M	Inspector Comments: 2010 - Small maintenance site. 2012: No observed change. [2012 Site ID: CHS_23-0_R]	38.284105 ° -121.718471 °	38.283302 ° -121.717814 °	5 Y
DWR ID:										
4	2.18	2.23	Supplemental Survey	USACE Erosion	WS	M	Inspector Comments: 2007 - Geotechnical failure of midside slope and wave wash/scalloping in toe area. Stone revetment upstream and downstream of site. Similar sites are present all along the right bank downstream of this site, most could be repaired with some maintenance. 2010 - Minor new erosion. 2012: No observed change. [2012 Site ID: CHS_22-8_R]	38.282100 ° -121.716817 °	38.281510 ° -121.716319 °	6 Y
DWR ID:										
5	2.38	2.54	Supplemental Survey	USACE Erosion	WS	M	Inspector Comments: 2008 - Small scour pockets and mid-slope wave wash. 2010 - More vegetation growth, could be fixed through maintenance. 2011 - Site extended downstream and new erosion. 2012: No observed change. [2012 Site ID: CHS_22-6_R]	38.280377 ° -121.714633 °	38.278306 ° -121.712722 °	8 Y
DWR ID:										
6	2.79	3.25	Earthen Levee	Vegetation	WSA/W	Ob	V8 : Environmental Requirements.	38.280919 ° -121.715756 °	38.275177 ° -121.709777 °	3 Y
DWR ID: DWR_RD2060_03_s_2012_3										
7	3.28	3.48	Earthen Levee	Vegetation	WSA/W	Ob	V8 : Environmental Requirements. Inspector Comments: There was a fire this spring that burned this veg. site, during this inspection new growth has sprouted up. 2012	38.270863 ° -121.706800 °	38.270324 ° -121.705904 °	12 Y
DWR ID: DWR_RD2060_03_s_2012_12										
8	3.78	4.00	Supplemental Survey	USACE Erosion	WS	M	Inspector Comments: 2011 - Several pockets of erosion from rotational failure and slumping toe. 2012: No observed change. [2012 Site ID: CHS_21-1_R]	38.264585 ° -121.698868 °	38.261616 ° -121.697423 °	10 Y
DWR ID:										

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/04/2012 10/04/2012	Herman Phillips

Levee Mile Report Line	1
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Land Side
Category	Earthen Levee
Item	Vegetation
RD 2060 Unit 3 looking downstream from levee mile 0.00 landside. Photo taken 10-04-2012.	
phillips_f_20121120_397.jpg	



Levee Mile Report Line	2
Start Levee Mile	1.55
End Levee Mile	1.70
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #1	
USACE2012_CHS_23-6_R_1.jpg	



Levee Mile Report Line	2
Start Levee Mile	1.55
End Levee Mile	1.70
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #2	
USACE2012_CHS_23-6_R_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 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/04/2012 10/04/2012	Herman Phillips

Levee Mile Report Line	3
Start Levee Mile	2.02
End Levee Mile	2.08
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #1	
USACE2012_CHS_23-0_R_1.jpg	



Levee Mile Report Line	3
Start Levee Mile	2.02
End Levee Mile	2.08
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #2	
USACE2012_CHS_23-0_R_2.jpg	



Levee Mile Report Line	4
Start Levee Mile	2.18
End Levee Mile	2.23
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #1	
USACE2012_CHS_22-8_R_1.jpg	



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/04/2012 10/04/2012	Herman Phillips

Levee Mile Report Line	4
Start Levee Mile	2.18
End Levee Mile	2.23
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #2	
USACE2012_CHS_22-8_R_2.jpg	



Levee Mile Report Line	5
Start Levee Mile	2.38
End Levee Mile	2.54
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #1	
USACE2012_CHS_22-6_R_1.jpg	



Levee Mile Report Line	5
Start Levee Mile	2.38
End Levee Mile	2.54
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #2	
USACE2012_CHS_22-6_R_2.jpg	



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2012

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/04/2012 10/04/2012	Herman Phillips

Levee Mile Report Line	5
Start Levee Mile	2.38
End Levee Mile	2.54
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #3	
USACE2012_CHS_22-6_R_3.jpg	



Levee Mile Report Line	5
Start Levee Mile	2.38
End Levee Mile	2.54
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #4	
USACE2012_CHS_22-6_R_4.jpg	



Levee Mile Report Line	8
Start Levee Mile	3.78
End Levee Mile	4.00
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #1	
USACE2012_CHS_21-1_R_1.jpg	



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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/04/2012 10/04/2012	Herman Phillips

Levee Mile Report Line	8
Start Levee Mile	3.78
End Levee Mile	4.00
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2012 Photo #2	
USACE2012_CHS_21-1_R_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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