

**Flood Control Project Maintenance
Levee Inspections**

Fall 2011 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

NA0008 Knights Landing Ridge Drainage District	Overall LMA Rating	Total LMA Miles				
	A	12.57				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Encroachments	0.24		0.24	1.91%		0.07
Cracking	0.01		0.01	0.08%		
<i>Supplemental</i>						
USACE Erosion Survey	0.07		0.07	0.56%		
<i>LMA Totals:</i>	0.32	0.00	0.32	2.55%	0.00	0.07

Unit No. 01 Knights Landing Ridge Cut RB NA0008	Overall Unit Rating	Total Unit Miles				
	A	6.43				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Encroachments	0.24		0.24	3.73%		
<i>Supplemental</i>						
USACE Erosion Survey	0.02		0.02	0.31%		
<i>Unit Totals:</i>	0.26	0.00	0.26	4.04%	0.00	0.00

Unit No. 02 Knights Landing Ridge Cut LB NA0008	Overall Unit Rating	Total Unit Miles				
	A	6.14				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Encroachments						0.07
Cracking	0.01		0.01	0.16%		
<i>Supplemental</i>						
USACE Erosion Survey	0.05		0.05	0.81%		
<i>Unit Totals:</i>	0.06	0.00	0.06	0.98%	0.00	0.07

**Flood Control Project Maintenance
Levee Inspections
LMA District Cover Sheet
Fall 2011 Levee Inspection Results**

Knights Landing Ridge Drainage District

	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 2011 Levee Inspection Results

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles
Unit No. 01 Knights Landing Ridge Cut	Right	6.43

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	4/22/2011 - 4/22/2011		9/27/2011 - 9/27/2011	
DWR Inspector	John Williamson		John Williamson	
Accompanied By	Chad Navarrot RD 108		Chad Navarrot RD 108	

Check one:

During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.

During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

Comments

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :
 DWR Summer/Winter Inspection Reports
 3310 El Camino Avenue, Suite 200
 Sacramento, CA 95821-9000

X _____ Date

Signature of LMA Representative

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Knights Landing Ridge Drainage District

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut				Right	6.43	09/27/2011 09/27/2011	John Williamson

LMIR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1	3.26	3.26	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2011: Toe scour and bank slumping. [2011 Site ID: KLR_3-5_R]	38.758432 ° -121.695158 °	38.759332 ° -121.696063 °	1 Y
2	3.86	3.86	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2011: Toe erosion and erosion pockets from tree popouts. More tree popouts are expected due to the eroding toe. [2011 Site ID: KLR_3-9_R]	38.764037 ° -121.701434 °	38.764905 ° -121.702074 °	2 Y
3	6.17	6.41	Earthen Levee	Encroachments	LS	M	Equipment	38.790007 ° -121.723308 °	38.792433 ° -121.726463 °	7 Y

<p>* Location</p> <p>LS : Land Side WS : Water Side CR : Crown</p>	<p>** Rating</p> <p>A : Acceptable PO : Partially Obstructing N : Not Inspected, see Inspector Comment C : Corrected M : Minimally Acceptable CO : Completely Obstructing U : Unacceptable W : Watch/Monitor</p>
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.43	09/27/2011 09/27/2011	John Williamson

Levee Mile Report Line	1
Start Levee Mile	3.26
End Levee Mile	3.26
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
USACE2011_KLR_3-5_R_1.jpg	



Levee Mile Report Line	1
Start Levee Mile	3.26
End Levee Mile	3.26
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
USACE2011_KLR_3-5_R_2.jpg	



Levee Mile Report Line	2
Start Levee Mile	3.86
End Levee Mile	3.86
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
USACE2011_KLR_3-9_R_1.jpg	



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.43	09/27/2011 09/27/2011	John Williamson

Levee Mile Report Line	2
Start Levee Mile	3.86
End Levee Mile	3.86
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
USACE2011_KLR_3-9_R_2.jpg	



Levee Mile Report Line	2
Start Levee Mile	3.86
End Levee Mile	3.86
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #3	
USACE2011_KLR_3-9_R_3.jpg	



Levee Mile Report Line	3
Start Levee Mile	6.17
End Levee Mile	6.41
Location	Land Side
Category	Earthen Levee
Item	Encroachments
The equipment and irrigation pipe is on the slope of the levee. Photo taken fall 2011.	
johngw_f_20111024_003.jpg	



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2011 Levee Inspection Results

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles
Unit No. 02 Knights Landing Ridge Cut	Left	6.14

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	4/22/2011 - 4/22/2011		9/27/2011 - 9/27/2011	
DWR Inspector	John Williamson		John Williamson	
Accompanied By	Chad Navarrot RD 108		Chad Navarrot RD 108	

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 Sacramento, CA 95821-9000

X _____ Date

Signature of LMA Representative

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	09/27/2011 09/27/2011	John Williamson

LMIR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
1	2.66	2.66	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2006 - The whole levee toe area is slowly slumping into the channel (creep) due to dewatering and poor slope soils. Occasional piping in the levee slope evident as well. Pistol-butted trees at the levee toe indicate slow retreat. 2011: Multiple scallops throughout the site and slumping of the toe. [2011 Site ID: KLR_3-0_L]	38.754899 ° -121.692653 °	38.757925 ° -121.693048 °	2 Y
2	2.90	2.90	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2006 - The whole levee toe area is slowly slumping into the channel (creep) due to dewatering and poor slope soils. Occasional piping in the levee slope evident as well. Pistol-butted trees at the levee toe indicate slow retreat. 2011: Slumping of the levee toe. [2011 Site ID: KLR_3-1_L]	38.758587 ° -121.693359 °	38.760053 ° -121.694686 °	3 Y
3	3.51	3.51	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2011: The toe has eroded away and there are a few scallops from bank slumping. [2011 Site ID: KLR_3-7_L]	38.765522 ° -121.700608 °	38.767336 ° -121.701023 °	4 Y
4	4.27	4.27	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2011: This site is the downstream section of the old KLR 5.3L site. Levee toe is slowly retreating. Cracking on top of the levee may indicate potential mass movement. [2011 Site ID: KLR_4-7_L]	38.775271 ° -121.703685 °	38.778115 ° -121.706195 °	5 Y
5	4.91	4.91	Earthen Levee	Cracking	LS	M	Schedule repair of subsidence prior to the next inspection.	38.781465 ° -121.709842 °	38.781465 ° -121.709842 °	17 Y
6	5.40	5.40	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2011: This site is the upstream section of the old KLR 5.3L site. Levee toe is slowly retreating. Cracking on top of the levee may indicate potential mass movement. [2011 Site ID: KLR_5-8_L]	38.786566 ° -121.716724 °	38.792395 ° -121.724091 °	6 Y
7	6.05	6.12	Earthen Levee	Encroachments	LS	CO	Crops Inspector Comments: No access; strawberries are being grown landside levee slope and crown	38.792735 ° -121.724092 °	38.792735 ° -121.724092 °	1 Y

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor N : Not Inspected, see Inspector Comment C : Corrected
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Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	09/27/2011 09/27/2011	John Williamson

Levee Mile Report Line	1
Start Levee Mile	2.66
End Levee Mile	2.66
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
USACE2011_KLR_3-0_L_1.jpg	



Levee Mile Report Line	1
Start Levee Mile	2.66
End Levee Mile	2.66
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
USACE2011_KLR_3-0_L_2.jpg	



Levee Mile Report Line	2
Start Levee Mile	2.90
End Levee Mile	2.90
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
USACE2011_KLR_3-1_L_1.jpg	



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Levee Inspection Report By Mile - Fall 2011

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	09/27/2011 09/27/2011	John Williamson

Levee Mile Report Line	2
Start Levee Mile	2.90
End Levee Mile	2.90
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
USACE2011_KLR_3-1_L_2.jpg	



Levee Mile Report Line	3
Start Levee Mile	3.51
End Levee Mile	3.51
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
USACE2011_KLR_3-7_L_1.jpg	



Levee Mile Report Line	3
Start Levee Mile	3.51
End Levee Mile	3.51
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
USACE2011_KLR_3-7_L_2.jpg	



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Levee Inspection Report By Mile - Fall 2011

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	09/27/2011 09/27/2011	John Williamson

Levee Mile Report Line	4
Start Levee Mile	4.27
End Levee Mile	4.27
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
USACE2011_KLR_4-7_L_1.jpg	



Levee Mile Report Line	4
Start Levee Mile	4.27
End Levee Mile	4.27
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
USACE2011_KLR_4-7_L_2.jpg	



Levee Mile Report Line	5
Start Levee Mile	4.91
End Levee Mile	4.91
Location	Land Side
Category	Earthen Levee
Item	Cracking
A crack on the landside levee slope tree. Photo taken fall 2011.	
johngw_f_20111011_001.jpg	



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	09/27/2011 09/27/2011	John Williamson

Levee Mile Report Line	6
Start Levee Mile	5.40
End Levee Mile	5.40
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #1

USACE2011_KLR_5-8_L_1.jpg



Levee Mile Report Line	6
Start Levee Mile	5.40
End Levee Mile	5.40
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #2

USACE2011_KLR_5-8_L_2.jpg



Levee Mile Report Line	7
Start Levee Mile	6.05
End Levee Mile	6.12
Location	Land Side
Category	Earthen Levee
Item	Encroachments

A current photo of strawberry patch on the levee. Photo taken fall 2011.

johngw_f_20111011_002.jpg



<p>* Location</p> <p>LS : Land Side WS : Water Side CR : Crown</p>	<p>** Rating</p> <p>A : Acceptable M : Minimally Acceptable U : Unacceptable</p>	<p>PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor</p>	<p>N : Not Inspected, see Inspector Comment C : Corrected</p>
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