

**Flood Control Project Maintenance
Levee Inspections
LMA District Cover Sheet
Spring 2012 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)				

** 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

Spring 2012 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)				
Date of Inspection	4/10/2012 - 4/10/2012			
DWR Inspector	John Williamson			
Accompanied By	Chad Navarrot RD 108			

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 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.43	04/10/2012 04/10/2012	John Williamson

LMIR No.	Levee Mile		Category	Item	* Location	+ Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1			Earthen Levee	Operations & Maintenance Manuals	LS	A Ma		°	°	8
DWR ID: DWR_NA0008_01_s_2012_8										
2			Earthen Levee	Emergency Supplies & Equipment	LS	A Ma		°	°	9
DWR ID: DWR_NA0008_01_s_2012_9										
3			Earthen Levee	Flood Preparedness & Training	LS	A Ma		°	°	10
DWR ID: DWR_NA0008_01_s_2012_10										
4	0.03	6.41	Earthen Levee	Vegetation	WS	M Ma	V1 : Control annual grass and weeds on the levee slopes and easements.	38.719375 ° -121.664305 °	38.792385 ° -121.726560 °	4 Y
DWR ID: DWR_NA0008_01_s_2012_4										
5	0.03	6.41	Earthen Levee	Vegetation	LS	M Ma	V1 : Control annual grass and weeds on the levee slopes and easements.	38.719375 ° -121.664307 °	38.792382 ° -121.726557 °	3 Y
DWR ID: DWR_NA0008_01_s_2012_3										
6	3.26	3.26	Supplemental	USACE Erosion Survey	WS	M Ma	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
DWR ID: DWR_NA0008_01_s_2012_1										
7	3.86	3.86	Supplemental	USACE Erosion Survey	WS	M Ma	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
DWR ID: DWR_NA0008_01_s_2012_2										
8	6.17	6.41	Earthen Levee	Encroachments	LS	M Ma	EQ : Equipment	38.790007 ° -121.723308 °	38.792433 ° -121.726463 °	7 Y
DWR ID: DWR_NA0008_01_s_2012_7										

* 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 - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.43	04/10/2012 04/10/2012	John Williamson

Levee Mile Report Line	4
Start Levee Mile	0.03
End Levee Mile	6.41
Location	Water Side
Category	Earthen Levee
Item	Vegetation
The grasses are taller that 12", photo taken spring 2012.	
johngw_s_20120411_685.jpg	



Levee Mile Report Line	5
Start Levee Mile	0.03
End Levee Mile	6.41
Location	Land Side
Category	Earthen Levee
Item	Vegetation
The grasses are taller than 12" in height, photo taken spring 2012.	
johngw_s_20120411_684.jpg	



Levee Mile Report Line	6
Start Levee Mile	3.26
End Levee Mile	3.26
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
johngw_s_20120313_157.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 - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.43	04/10/2012 04/10/2012	John Williamson

Levee Mile Report Line	6
Start Levee Mile	3.26
End Levee Mile	3.26
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
johngw_s_20120313_158.jpg	



Levee Mile Report Line	7
Start Levee Mile	3.86
End Levee Mile	3.86
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
johngw_s_20120313_159.jpg	



Levee Mile Report Line	7
Start Levee Mile	3.86
End Levee Mile	3.86
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
johngw_s_20120313_160.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 - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.43	04/10/2012 04/10/2012	John Williamson

Levee Mile Report Line	7
Start Levee Mile	3.86
End Levee Mile	3.86
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #3

johnngw_s_20120313_161.jpg



Levee Mile Report Line	8
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.

johnngw_s_20120313_162.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

Spring 2012 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)				
Date of Inspection	4/10/2012 - 4/10/2012			
DWR Inspector	John Williamson			
Accompanied By	Chad Navarrot RD 108			

Summer & Winter Inspections

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	04/10/2012 04/10/2012	John Williamson

LMIR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1	0.02	6.04	Earthen Levee	Vegetation	LS	M Ma	V1 : Control annual grass and weeds on the levee slopes and easements.	38.724485 ° -121.665513 °	38.792672 ° -121.724090 °	7 Y
DWR ID: DWR_NA0008_02_s_2012_7										
2	0.02	6.04	Earthen Levee	Vegetation	WS	M Ma	V1 : Control annual grass and weeds on the levee slopes and easements.	38.724485 ° -121.665512 °	38.792667 ° -121.724087 °	8 Y
DWR ID: DWR_NA0008_02_s_2012_8										
3	2.66	2.66	Supplemental Levee	USACE Erosion Survey	WS	M Ma	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
DWR ID: DWR_NA0008_02_s_2012_2										
4	2.90	2.90	Supplemental Levee	USACE Erosion Survey	WS	M Ma	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
DWR ID: DWR_NA0008_02_s_2012_3										
5	3.51	3.51	Supplemental Levee	USACE Erosion Survey	WS	M Ma	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
DWR ID: DWR_NA0008_02_s_2012_4										
6	4.27	4.27	Supplemental Levee	USACE Erosion Survey	WS	M Ma	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
DWR ID: DWR_NA0008_02_s_2012_5										
7	4.91	4.91	Earthen Levee	Cracking	LS	C Ma	CR2 : Schedule repair of subsidence prior to the next inspection.	38.781465 ° -121.709842 °	38.781465 ° -121.709842 °	17
DWR ID: DWR_NA0008_02_s_2012_17										
8	5.40	5.40	Supplemental Levee	USACE Erosion Survey	WS	M Ma	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
DWR ID: DWR_NA0008_02_s_2012_6										
9	6.05	6.12	Earthen Levee	Encroachments	LS	U En	CR : Crops Inspector Comments: No access; strawberries are being grown landside levee slope and crown	38.792735 ° -121.724092 °	38.792735 ° -121.724092 °	1 Y
DWR ID: DWR_NA0008_02_s_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 - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	04/10/2012 04/10/2012	John Williamson

Levee Mile Report Line	1
Start Levee Mile	0.02
End Levee Mile	6.04
Location	Land Side
Category	Earthen Levee
Item	Vegetation
The grasses are taller than 12", photo taken spring 2012	
johngw_s_20120411_686.jpg	



Levee Mile Report Line	2
Start Levee Mile	0.02
End Levee Mile	6.04
Location	Water Side
Category	Earthen Levee
Item	Vegetation
The grasses are taller than 12", photo taken spring 2012.	
johngw_s_20120411_687.jpg	



Levee Mile Report Line	3
Start Levee Mile	2.66
End Levee Mile	2.66
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
johngw_s_20120313_164.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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Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	04/10/2012 04/10/2012	John Williamson

Levee Mile Report Line	3
Start Levee Mile	2.66
End Levee Mile	2.66
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
johngw_s_20120313_165.jpg	



Levee Mile Report Line	4
Start Levee Mile	2.90
End Levee Mile	2.90
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
johngw_s_20120313_166.jpg	



Levee Mile Report Line	4
Start Levee Mile	2.90
End Levee Mile	2.90
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
johngw_s_20120313_167.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 - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	04/10/2012 04/10/2012	John Williamson

Levee Mile Report Line	5
Start Levee Mile	3.51
End Levee Mile	3.51
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
johngw_s_20120313_168.jpg	



Levee Mile Report Line	5
Start Levee Mile	3.51
End Levee Mile	3.51
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
johngw_s_20120313_169.jpg	



Levee Mile Report Line	6
Start Levee Mile	4.27
End Levee Mile	4.27
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
johngw_s_20120313_170.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 - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	04/10/2012 04/10/2012	John Williamson

Levee Mile Report Line	6
Start Levee Mile	4.27
End Levee Mile	4.27
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
johngw_s_20120313_171.jpg	



Levee Mile Report Line	8
Start Levee Mile	5.40
End Levee Mile	5.40
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
johngw_s_20120313_172.jpg	



Levee Mile Report Line	8
Start Levee Mile	5.40
End Levee Mile	5.40
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
johngw_s_20120313_173.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 - Spring 2012

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.14	04/10/2012 04/10/2012	John Williamson

Levee Mile Report Line	9
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_s_20120313_163.jpg



Levee Mile Report Line	9
Start Levee Mile	6.05
End Levee Mile	6.12
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Photo of the strawberry patch in the spring of 2012.

johngw_s_20120411_688.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>N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain</p>	<p>+ Issue Type</p> <p>Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement</p>
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