

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start		Rating **	A	Issue No.	3
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_NA0008_01_s _ 2017_3				
Comment Code					
Inspector Comment					
District has levee O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_NA0008_01_s _ 2013_8				
Comment Code					
Inspector Comment					
District maintains a stockpile of flood fight response material.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

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_NA0008_01_s_2013_9					
Comment Code						
Inspector Comment						
District has written response plan and regular flood fight training.						

No Photos

LM Start	0.25	Rating **	A/W	Issue No.	33	
LM End	0.25	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.722222 °	38.722222 °	
				-121.666357 °	-121.666357 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:48010 DS_ID:19360 EP_NO: 9302 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: Pipe has been grouted in place under permit 18987, 2015Pipe completely rusted through on LS slope of levee at toe/headwall of concrete distribution box. Pipe needs replacement or proper abandonment. Pipe not visible at outlet. FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 27 feet below the crown. Slide gate on the waterside (WS) end. 12-foot by 6-foot concrete box on the landside (LS) end. (36-inch pipe [HLM 1.62] authorized under Automatic Board Order (ABO) issued as Permit No. 9302, 1974 - Barbara Lowe Elliott; 36-inch pipe abandoned by removing ends and pumping pipe full of concrete under Permit No. 18987, 2016 - Knaggs Ranch, LLC, care of John Brennan). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 0+30)]. FS Date: 5/16/2016 3:59:29 PM						

Photo 1 of 3 : UCIP_FA_2017_48010_21582.jpg



Concrete distribution box on LS toe.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	0.25	Rating **	A/W	Issue No.	33 (cont)
LM End	0.25	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.722222 °	38.722222 °
				-121.666357 °	-121.666357 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:48010
DS_ID:19360
EP_NO: 9302
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments: Pipe has been grouted in place under permit 18987, 2015Pipe completely rusted through on LS slope of levee at toe/headwall of concrete distribution box. Pipe needs replacement or proper abandonment. Pipe not visible at outlet.
FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 27 feet below the crown. Slide gate on the waterside (WS) end. 12-foot by 6-foot concrete box on the landside (LS) end. (36-inch pipe [HLM 1.62] authorized under Automatic Board Order (ABO) issued as Permit No. 9302, 1974 - Barbara Lowe Elliott; 36-inch pipe abandoned by removing ends and pumping pipe full of concrete under Permit No. 18987, 2016 - Knaggs Ranch, LLC, care of John Brennan). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 0+30)].
FS Date: 5/16/2016 3:59:29 PM

LM Start	0.25	Rating **	A/W	Issue No.	33 (cont)
LM End	0.25	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2017_48010_21581.jpg



Slide gate on metal stand on WS toe. Pipe opening not visible.

Photo 3 of 3 : UCIP_FA_2017_48010_21580.jpg



Pipe failure at connection to concrete box on LS toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	1.74	Rating **	M	Issue No.	28
LM End	1.87	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.737104 °	38.738684 °
				-121.685624 °	-121.687077 °
DWR ID	DWR_NA0008_01_f_2017_28				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Multiple rodent holes on section of landside slope.					

Photo 1 of 2 : FA_2017_NA0008_256_28_20170926_00066.jpg



View of rodent holes on the landside slope. Fall 2017.

LM Start	1.74	Rating **	M	Issue No.	28 (cont)
LM End	1.87	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2017_NA0008_256_28_20170926_00067.jpg



Additional rodent hole on the landside slope. Fall 2017.

LM Start	2.24	Rating **	C	Issue No.	32
LM End	2.24	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.743013 °	38.743013 °
				-121.691004 °	-121.691004 °
DWR ID	DWR_NA0008_01_s_2017_32				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
100' sloughing section observed during Spring 2017 inspection. Site repaired as of this inspection date.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	2.58	Rating **	M	Issue No.	37
LM End	2.58	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.747110 °	38.747110 °
				-121.694415 °	-121.694415 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:11067
DS_ID:19364
EP_NO: 9307
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: Siphon breaker on LS burried or broken off and missing.
FIELD_STRUCT_DESC: 1 of 2: 14-inch steel drainage pipe through the levee, 5.4 feet below the crown. Pump house on a pile structure at the landside (LS) toe. Siphon breaker on the LS slope. Service pole and anchor at the LS toe. (14-inch pipe [HLM 2.62] authorized under Automatic Board Order (ABO) issued as Permit No. 9307, 1974 - Azalene E. Lowe; a 12-foot section of an existing 14-inch pipe on LS replaced and name change under Permit No. 9307-1, 2016 - Ann Grube). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 123+25)].
FS Date: 4/5/2013

Photo 1 of 1 : UCIP_FA_2017_11067_18431.jpg



Pump and pipe on LS toe.

* 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
--	--	---	--	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	2.58	Rating **	M	Issue No.	38 (cont)	
LM End	2.58	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.747204 °	38.747204 °	
				-121.694440 °	-121.694440 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:13205						
DS_ID:19391						
EP_NO: 9307						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Walkway to actuator slide gate is missing. No method of actuating slide gate.						
FIELD_STRUCT_DESC: 2 of 2: 48-inch by 48-inch reinforced concrete box drainage culvert through the levee, 23 feet below the crown.						
Walkway to slide gate on the waterside (WS) end. Concrete headwalls on both ends. Service pole and anchor at the landside (LS) toe.						
Concrete headwalls on both ends. (four foot by four foot culvert [HLM 2.62] authorized under Automatic Board Order (ABO) issued as Permit No. 9307, 1974 - Azalene E. Lowe). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 123+55.5)].						
FS Date: 4/5/2013						

Photo 3 of 3 : UCIP_FA_2017_13205_21605.jpg



Inlet located next to concrete headwall on LS toe.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	2.67	Rating **	A/W	Issue No.	39
LM End	2.67	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.748391 °	38.748391 °
				-121.694814 °	-121.694814 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:16105
DS_ID:19365
EP_NO: 9301
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments:
FIELD_STRUCT_DESC: 1 of 2: 18-inch steel drainage pipe through the levee, 6.4 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump house mounted on concrete box in irrigation ditch at the landside (LS) toe. (one 18-inch and one 24-inch pipes [HLM 2.7] authorized under Automatic Board Order (ABO) issued as Permit No. 9301, 1974 - Reclamation District No. 730). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 128+00)].
FS Date: 4/5/2013

LM Start	2.67	Rating **	A/W	Issue No.	39 (cont)
LM End	2.67	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2017_16105_27207.jpg



Pipe on WS slope.

Photo 2 of 3 : UCIP_FA_2017_16105_27209.jpg



Pumphouse and pipe on LS toe.

* 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
--	--	---	--	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	2.67	Rating **	A/W	Issue No.	40 (cont)
LM End	2.67	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.748404 °	38.748404 °
				-121.694818 °	-121.694818 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:16106
DS_ID:19392
EP_NO: 9301
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments:
FIELD_STRUCT_DESC: 2 of 2: 24-inch steel drainage pipe through the levee, 7.3 feet below the crown. Pump house mounted on concrete box in irrigation ditch at the landside (LS) toe. Siphon breaker in riser on the waterside (WS) slope. (one 24-inch and one 18-inch pipes [HLM 2.7] authorized under Automatic Board Order (ABO) issued as Permit No. 9301, 1974 - Reclamation District No. 730). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 128+00)].
FS Date: 4/5/2013

LM Start	2.67	Rating **	A/W	Issue No.	40 (cont)
LM End	2.67	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2017_16106_27212.jpg



Siphon breaker on WS slope

Photo 3 of 3 : UCIP_FA_2017_16106_27214.jpg



Pipe on WS 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
--	--	---	--	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	2.70	Rating **	A/W	Issue No.	42
LM End	2.70	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.748909 °	38.748909 °
				-121.694811 °	-121.694811 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:11244
DS_ID:19394
EP_NO: 8752
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments:
FIELD_STRUCT_DESC: 1 of 2: 30-inch asphalt coated steel drainage pipe through the levee, 3 feet below the crown. Siphon breaker on pipe on the waterside (WS) shoulder. Pump on a steel pile structure at the landside (LS) toe. (Permit No. 8752, 1973 - Reclamation District No. 730). Some design drawings available in permit. [Additional Reference(s): DWR Levee Log, 1990].
FS Date: 4/5/2013

LM Start	2.70	Rating **	A/W	Issue No.	42 (cont)
LM End	2.70	Issue Type +	Ma	Location *	

Photo 1 of 2 : UCIP_FA_2017_11244_18603.jpg



Pump on steel pile structure at LS toe with pipe on slope.

Photo 2 of 2 : UCIP_FA_2017_11244_18602.jpg



Siphon breaker on pipe at WS 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
--	--	---	--	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	2.71	Rating **	A/W	Issue No.	43
LM End	2.71	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.748929 °	38.748929 °
				-121.694749 °	-121.694749 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:11247
DS_ID:19395
EP_NO: 8752
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments:
FIELD_STRUCT_DESC: 2 of 2: 24-inch steel drainage pipe through the levee, 3 feet below the crown. Siphon breaker on pipe on the waterside (WS) shoulder with a pump on a steel pile structure at the landside (LS) toe. Butterfly shutoff valve at the LS toe. (Permit No. 8752, 1973 - Reclamation District No. 730). Some design drawings available.
[Additional Reference(s): DWR Levee Log, 1990].
FS Date: 4/5/2013

LM Start	2.71	Rating **	A/W	Issue No.	43 (cont)
LM End	2.71	Issue Type +	Ma	Location *	

Photo 1 of 2 : UCIP_FA_2017_11247_18605.jpg



Pump on steel pile structure with butterfly valve and pipe on LS slope.

Photo 2 of 2 : UCIP_FA_2017_11247_18604.jpg



Siphon breaker on pipe at WS shoulder.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	3.36	Rating **	M	Issue No.	2
LM End	3.44	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.758432 °	38.759332 °
				-121.695158 °	-121.696063 °
DWR ID	DWR_NA0008_01_s_2016_2				
Comment Code					
Inspector Comment					
2011 - Toe scour and bank slumping. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_3-5_R]					

No Photos

LM Start	3.50	Rating **	U	Issue No.	20
LM End	3.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.759910 °	38.759910 °
				-121.696920 °	-121.696920 °
DWR ID	DWR_NA0008_01_f_2015_20				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 2 : FA_2017_NA0008_256_20_20170911_00006.jpg



Deep erosion at the bottom of the waterside slope 3-4 foot cut. Fall 2013

LM Start	3.50	Rating **	U	Issue No.	20 (cont)
LM End	3.50	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2017_NA0008_256_20_20170911_00007.jpg



View of the erosion on the waterward side of the levee looking upstream. Fall 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	3.78	Rating **	M	Issue No.	30
LM End	3.78	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.762886 °	38.762886 °
				-121.700406 °	-121.700406 °
DWR ID	DWR_NA0008_01_s_2017_30				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Hole is at the toe of the levee on the waterward side.					

Photo 1 of 1 : FA_2017_NA0008_256_30_20170911_00012.jpg



View of the erosion at the toe of the levee on the waterward side. Spring 2016.

LM Start	3.86	Rating **	M	Issue No.	31
LM End	3.86	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.763751 °	38.763751 °
				-121.701398 °	-121.701398 °
DWR ID	DWR_NA0008_01_s_2016_31				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion at the toe of the levee. LMA is monitoring erosion with stakes.					

Photo 1 of 1 : FA_2017_NA0008_256_31_20170911_00013.jpg



View of the erosion at the toe of the levee on the waterward side. Spring 2016.

* 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
--	--	---	--	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	3.88	Rating **	M	Issue No.	1
LM End	3.95	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.764037 °	38.764905 °
				-121.701434 °	-121.702074 °
DWR ID	DWR_NA0008_01_f_2017_1				
Comment Code					
Inspector Comment					
2011 - Toe erosion and erosion pockets from tree popouts. More tree popouts are expected due to the eroding toe. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_3-9_R]					

No Photos

LM Start	4.28	Rating **	C	Issue No.	21	
LM End	4.28	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			38.769608 °		38.769608 °
				-121.703076 °		-121.703076 °
DWR ID	DWR_NA0008_01_f_2015_21					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						

No Photos

LM Start	5.90	Rating **	C	Issue No.	15
LM End	5.90	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.787934 °	38.787934 °
				-121.720742 °	-121.720742 °
DWR ID	DWR_NA0008_01_f_2017_15				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Large den at landside toe.					

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	
--	--	---	--	---	--

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	09/26/2017 09/26/2017	Zach Jojola

LM Start	6.23	Rating **	C	Issue No.	24
LM End	6.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.791286 °	38.791286 °
				-121.725034 °	-121.725034 °
DWR ID	DWR_NA0008_01_f_2015_24				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	09/26/2017 09/26/2017	Zach Jojola

LM Start	3.60	Rating **	M	Issue No.	3
LM End	3.73	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.765522 °	38.767336 °
				-121.700608 °	-121.701023 °
DWR ID	DWR_NA0008_02_s_2016_3				
Comment Code					
Inspector Comment					
2011 - The toe has eroded away and there are a few scallops from bank slumping. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_3-7_L]					

No Photos

LM Start	3.93	Rating **	A/W	Issue No.	29
LM End	3.93	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.770317 °	38.770317 °
				-121.701281 °	-121.701281 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11293 DS_ID:19374 EP_NO: 9317 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 1 of 2: 16-inch steel discharge pipe through the levee, 3 feet below the crown. Pump house on pile structure in drainage ditch on the landside (LS). Siphon breaker on the pipe on the waterside (WS). Service pole at the pump house. (16-inch pipe [HLM 3.97] authorized under Automatic Board Order (ABO) issued as Permit No. 9317, 1974 - Reclamation District No. 819). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 211+05) (15-inch pipe listed)]. FS Date: 4/9/2013					

Photo 1 of 3 : UCIP_FA_2017_11293_18675.jpg



Pump on LS toe.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	09/26/2017 09/26/2017	Zach Jojola

LM Start	3.93	Rating **	A/W	Issue No.	29 (cont)
LM End	3.93	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.770317 °	38.770317 °
				-121.701281 °	-121.701281 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:11293
DS_ID:19374
EP_NO: 9317
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments:
FIELD_STRUCT_DESC: 1 of 2: 16-inch steel discharge pipe through the levee, 3 feet below the crown. Pump house on pile structure in drainage ditch on the landside (LS). Siphon breaker on the pipe on the waterside (WS). Service pole at the pump house. (16-inch pipe [HLM 3.97] authorized under Automatic Board Order (ABO) issued as Permit No. 9317, 1974 - Reclamation District No. 819). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 211+05) (15-inch pipe listed)].
FS Date: 4/9/2013

LM Start	3.93	Rating **	A/W	Issue No.	29 (cont)
LM End	3.93	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2017_11293_18674.jpg



Pump and pipes on LS toe.

Photo 3 of 3 : UCIP_FA_2017_11293_18673.jpg



16-inch pipe with siphon breaker on WS shoulder.

* 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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	09/26/2017 09/26/2017	Zach Jojola

LM Start	3.94	Rating **	A/W	Issue No.	30
LM End	3.94	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.770335 °	38.770335 °
				-121.701286 °	-121.701286 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11291 DS_ID:19401 EP_NO: 9317 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 2 of 2: 24-inch steel discharge pipe through the levee, 9 feet below the crown. Pump house on pile structure in drainage ditch on the landside (LS). Siphon breaker on the pipe on the waterside (WS) with a butterfly shutoff valve. Service pole at the pump house. (Permit No. 9317, 1974 - Reclamation District No. 819). Pipe replaced in 2012. [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 210+99)]. FS Date: 4/9/2013					

Photo 1 of 3 : UCIP_FA_2017_11291_18669.jpg



Pumphouse at LS toe.

LM Start	3.94	Rating **	A/W	Issue No.	30 (cont)
LM End	3.94	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2017_11291_18668.jpg



Pipe in grass on WS shoulder.

* 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
--	--	---	--	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	09/26/2017 09/26/2017	Zach Jojola

LM Start	3.94	Rating **	A/W	Issue No.	30 (cont)	
LM End	3.94	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.770335 °	38.770335 °	
				-121.701286 °	-121.701286 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:11291 DS_ID:19401 EP_NO: 9317 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 2 of 2: 24-inch steel discharge pipe through the levee, 9 feet below the crown. Pump house on pile structure in drainage ditch on the landside (LS). Siphon breaker on the pipe on the waterside (WS) with a butterfly shutoff valve. Service pole at the pump house. (Permit No. 9317, 1974 - Reclamation District No. 819). Pipe replaced in 2012. [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 210+99)]. FS Date: 4/9/2013						

Photo 3 of 3 : UCIP_FA_2017_11291_18667.jpg



Siphon breaker and butterfly valve on WS shoulder.

LM Start	4.07	Rating **	C	Issue No.	25
LM End	4.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.772269 °	38.772269 °
				-121.701869 °	-121.701869 °
DWR ID	DWR_NA0008_02_s_2017_25				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Rodent den on waterside levee slope.					

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**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	09/26/2017 09/26/2017	Zach Jojola

LM Start	4.30	Rating **	M	Issue No.	4
LM End	4.55	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.775271 °	38.778115 °
				-121.703685 °	-121.706195 °
DWR ID	DWR_NA0008_02_s _ 2016_4				
Comment Code					
Inspector Comment					
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. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_4-7_L]					

No Photos

LM Start	5.34	Rating **	A/W	Issue No.	13
LM End	5.34	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.786504 °	38.786504 °
				-121.716261 °	-121.716261 °
DWR ID	DWR_NA0008_02_f _ 2017_13				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2017_NA0008_257_13_20170911_00002.jpg



View of a rodent hole on LS slope. Fall 2016.

LM Start	5.36	Rating **	M	Issue No.	6
LM End	5.93	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.786566 °	38.792395 °
				-121.716724 °	-121.724091 °
DWR ID	DWR_NA0008_02_s _ 2016_6				
Comment Code					
Inspector Comment					
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. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_5-8_L]					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2017

Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	09/26/2017 09/26/2017	Zach Jojoia

LM Start	5.66	Rating **	C	Issue No.	16
LM End	5.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.789794 °	38.789794 °
				-121.720338 °	-121.720338 °
DWR ID	DWR_NA0008_02_f_2015_16				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	5.72	Rating **	M	Issue No.	19
LM End	5.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.790385 °	38.790385 °
				-121.721131 °	-121.721131 °
DWR ID	DWR_NA0008_02_f_2015_19				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

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
--	--	---	---