

**Flood Control Project Maintenance  
Levee Inspections****LMA District Cover Sheet****Spring 2014 Levee Inspection Results****Sutter Maintenance Yard Maintenance Area 0013**

	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 2014 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway			Bank	Unit Miles
Unit No. 01 Cherokee Canal			Right	18.87
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	03/20/2014 - 03/20/2014			
DWR Inspector	Bob Duffey			
Accompanied By	Jason Cooper Sutter Maintenance Yard			

**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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start		Rating **	A	Issue No.	1
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals				°
					°
DWR ID	DWR_MA0013_01_s _ 2013_1				
Action/Comments					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment				°
					°
DWR ID	DWR_MA0013_01_s _ 2013_8				
Action/Comments					

No Photos

LM Start		Rating **	A	Issue No.	16
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training				°
					°
DWR ID	DWR_MA0013_01_s _ 2013_16				
Action/Comments					

No Photos

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	0.60	Rating **	M	Issue No.	19
LM End	0.60	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.590173 °	39.590173 °
				-121.700617 °	-121.700617 °
DWR ID	DWR_MA0013_01_s _ 2013_19				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					

Photo 1 of 1 : rduffey\_s\_20140304\_446.jpg



View of the vehicle erosion along the waterside slope.

LM Start	0.66	Rating **	M	Issue No.	14
LM End	1.20	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.589272 °	39.581472 °
				-121.700599 °	-121.700518 °
DWR ID	DWR_MA0013_01_s _ 2012_14				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_443.jpg



View of the agricultural ditch along the toe of the levee.

LM Start	0.76	Rating **	M	Issue No.	12
LM End	0.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.587905 °	39.587505 °
				-121.700822 °	-121.700880 °
DWR ID	DWR_MA0013_01_s _ 2012_12				
Action/Comments					
Equipment					

Photo 1 of 1 : rduffey\_s\_20140304\_442.jpg



View of the equipment along the landside toe of the levee.

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	0.97	Rating **	M	Issue No.	20
LM End	0.97	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.584885 °	39.584885 °
				-121.700487 °	-121.700487 °
DWR ID	DWR_MA0013_01_s _ 2013_20				
Action/Comments					
Prunings					

Photo 1 of 1 : rduffey\_s\_20140304\_447.jpg



View of the prunings along the landside toe.

LM Start	1.70	Rating **	M	Issue No.	4
LM End	1.70	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.575816 °	39.575816 °
				-121.702900 °	-121.702900 °
DWR ID	DWR_MA0013_01_s _ 2014_4				
Action/Comments					

Photo 1 of 1 : UCIP\_4429.jpg



Inspector Comments: FS\_ID:25107  
 EP\_NO: N/A  
 Repair Type:  
 Crossing Status:  
 UCIP Comments: Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing/15/2013 Same as last inspection12/2/2013 Same as last inspection.  
 FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete headwall on the landward side. 36-inch concrete standpipe in the channel with 2 piles to deflect debris (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.69).  
 FS Date: 12/10/2013 7:32:16 AM

WS view looking upstream.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	2.36	Rating **	M	Issue No.	21
LM End	2.36	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.566434 °	39.566434 °
				-121.703750 °	-121.703750 °
DWR ID	DWR_MA0013_01_s_2014_21				
Action/Comments					
Inspector Comments: FS_ID:25108					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Non functional crossing due to LS headwall buried.					
This crossing was listed in the USACE Periodic Inspection report as					
Corp's inspect ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or					
outlet visible7/15/2013 Same as last inspection12/2/2013 Same					
as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe					
through the levee 7.8 feet below the crown. Slide gate in corrugated					
metal pipe riser on the waterward slope. Pipe continues across					
channel. Concrete "U" headwall on the landward side. (USACE-1960).					
This entry matches the Drainage or Irrigation Structure referenced in					
O&M manual (HLM 2.35).					
FS Date: 12/10/2013 7:33:08 AM					

Photo 1 of 1 : UCIP\_4434.jpg



Corrugated riser located on WS slope.

LM Start	3.07	Rating **	M	Issue No.	22
LM End	3.07	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.556276 °	39.556276 °
				-121.706510 °	-121.706510 °
DWR ID	DWR_MA0013_01_s_2014_22				
Action/Comments					
Inspector Comments: FS_ID:25110					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Crossing not visible during the Spring 2012					
Inspection. Attempt to find crossing during next inspection when slopes					
are cleared of vegetation 7/15/2013 Same as last inspection. Unable					
to locate 12/2/2013 Unable to locate.					
FIELD_STRUCT_DESC: 24-inch drainpipe through the levee, flap gate					
on waterward end. Concrete headwall on both ends.					
FS Date: 12/10/2013 7:36:37 AM					

No Photos

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	3.80	Rating **	M	Issue No.	23
LM End	3.80	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.546317 °	39.546317 °
				-121.707510 °	-121.707510 °
DWR ID	DWR_MA0013_01_s_2014_23				
Action/Comments					
Inspector Comments: FS_ID:25115					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: LS slide gate covered with silt. Slide gate is bent.					
Crossing appears not be in use. Limited inspection on WS and LS					
slope due to dense vegetation. Need photos of cleared					
slope 7/15/2013 Slopes have been cleared of vegetation and are in					
good condition. LS screw gate is still bent and silted over 12/2/2013					
Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through					
the levee, 7.9 feet below the crown. Flap gate on the waterward end.					
Screw gate on the landward end. Concrete "U" headwalls on both ends					
(USACE-1960). This entry matches the Drainage or Irrigation Structure					
referenced in O&M manual (HLM 3.82).					
FS Date: 12/10/2013 7:43:49 AM					

Photo 1 of 1 : UCIP\_4437.jpg



LS slide gate covered with silt. Slide gate is bent.

LM Start	4.13	Rating **	M	Issue No.	18
LM End	4.20	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.541660 °	39.540651 °
				-121.707408 °	-121.707404 °
DWR ID	DWR_MA0013_01_s_2013_18				
Action/Comments					
Tree or limb					

Photo 1 of 1 : rduffey\_s\_20140304\_445.jpg



View of the redwood trees along the landside slope.

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	4.42	Rating **	M	Issue No.	24
LM End	4.42	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.537516 °	39.537516 °
				-121.707580 °	-121.707580 °
DWR ID	DWR_MA0013_01_s_2014_24				
Action/Comments					
Inspector Comments: FS_ID:25117					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0189 for sediment and grass blocking WS and LS 7/15/2013 Same as last inspection 12/2/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 36-inch corrugated metal drainpipe through the levee, 9.1 feet below The crown. Flap gate on the waterward end. Slide gate on landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 4.43).					
FS Date: 12/10/2013 7:59:38 AM					

Photo 1 of 1 : UCIP\_4447.jpg



View of WS slope and toe.

LM Start	4.55	Rating **	A	Issue No.	43
LM End	4.55	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.535629 °	39.535629 °
				-121.707708 °	-121.707708 °
DWR ID	DWR_MA0013_01_s_2014_43				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : rduffey\_s\_20140428\_236.jpg



View of native grasses on both slopes.

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	5.42	Rating **	M	Issue No.	25
LM End	5.42	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523236 °	39.523236 °
				-121.707650 °	-121.707650 °
DWR ID	DWR_MA0013_01_s _ 2014_25				

Photo 1 of 1 : UCIP\_4451.jpg



Action/Comments					
Inspector Comments: FS_ID:25119					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0204 for restriction view of gate 7/15/2013 Same as last inspection 12/2/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 8.4 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.43).					
FS Date: 12/10/2013 8:01:26 AM					

View of outlet cleared of vegetation.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	5.72	Rating **	M	Issue No.	26
LM End	5.72	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.519212 °	39.519212 °
				-121.709030 °	-121.709030 °
DWR ID	DWR_MA0013_01_s _ 2014_26				
Action/Comments					
Inspector Comments: FS_ID:25125					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13D_2011_p_0210 for WS gate submerged 7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear 2/2/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 9.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.73).					
FS Date: 12/10/2013 8:27:58 AM					

Photo 1 of 1 : UCIP\_4454.jpg



View of WS flap gate buried.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	5.96	Rating **	M	Issue No.	27
LM End	5.96	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.516059 °	39.516059 °
				-121.710810 °	-121.710810 °
DWR ID	DWR_MA0013_01_s_2014_27				

Action/Comments					
Inspector Comments: FS_ID:25126					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Burrow activity near crossing; burrow holes present on LS/15/2013 Same as last inspection12/2/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 6.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.97).					
FS Date: 12/10/2013 8:30:02 AM					

Photo 1 of 1 : UCIP\_4465.jpg



View of LS slide gate.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	6.33	Rating **	M	Issue No.	28
LM End	6.33	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.511337 °	39.511337 °
				-121.713620 °	-121.713620 °
DWR ID	DWR_MA0013_01_s_2014_28				
Action/Comments					
Inspector Comments: FS_ID:25127					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: LS slide gate is buried. Pipe is not visible on LS toe.					
Limited inspection on WS slope due to dense vegetation 7/15/2013					
WS slope has been cleared of vegetation and is in good condition. LS					
screw gate is still buried 2/2/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through					
the levee, 7.4 feet below the crown. Flap gate on the waterward end.					
Slide gate on the landward end. Concrete "U" headwalls on both ends					
(USACE-1960). This entry matches the Drainage or Irrigation Structure					
referenced in O&M manual (HLM 6.34).					
FS Date: 12/10/2013 8:33:30 AM					

Photo 1 of 1 : UCIP\_4470.jpg



View of LS slope and toe.

LM Start	6.51	Rating **	M	Issue No.	3
LM End	7.09	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.508928 °	39.501438 °
				-121.714842 °	-121.719715 °
DWR ID	DWR_MA0013_01_s_2012_3				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_438.jpg



View of the agricultural ditch along the toe.

**\* 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  
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Levee Inspections**

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**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	6.55	Rating **	M	Issue No.	29
LM End	6.55	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.508309 °	39.508309 °
				-121.715100 °	-121.715100 °
DWR ID	DWR_MA0013_01_s _ 2014_29				
Action/Comments					
Inspector Comments: FS_ID:25128					
EP_NO: 5200B					
Repair Type:					
Crossing Status:					
UCIP Comments: Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS 3/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS 2/2/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 1 of 10 items under Board Order 5200, 5200A, and 5200B: 24-inch corrugated metal drainpipe through the levee, 7.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete head wall on both ends (Board Order 5200B-1965). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.56).					
FS Date: 12/10/2013 8:35:19 AM					

Photo 1 of 1 : UCIP\_4473.jpg



View of LS slide gate. Levee section missing behind boards.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	6.56	Rating **	M	Issue No.	30
LM End	6.56	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.508298 °	39.508298 °
				-121.715100 °	-121.715100 °
DWR ID	DWR_MA0013_01_s_2014_30				
Action/Comments					
Inspector Comments: FS_ID:25129					
EP_NO: 5200B					
Repair Type:					
Crossing Status:					
UCIP Comments: Clear wooden debris on upstream headwall.					
Upstream location latitude = 39.508298, longitude = -121.715103.					
Downstream location latitude = 39.50797, longitude = -121.71534;					
7/15/2013 Same as last inspection12/2/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 2 of 10 items under Board Order 5200, 5200A, and 5200B: 36-inch concrete reinforced drain pipe through levee along landward shoulder, 11.1 feet below crown. Crossing saddles landward slope, open on both ends. (Board Order 5200B-1967)					
FS Date: 12/10/2013 8:37:33 AM					

Photo 1 of 1 : UCIP\_4481.jpg



View of crossing through ramp.

LM Start	6.63	Rating **	M	Issue No.	2
LM End	6.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.507337 °	39.507337 °
				-121.715693 °	-121.715693 °
DWR ID	DWR_MA0013_01_s_2012_2				
Action/Comments					
Material					

Photo 1 of 1 : rduffey\_s\_20140304\_437.jpg



View of a concrete block along the toe.

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	7.09	Rating **	M	Issue No.	31
LM End	7.09	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.501479 °	39.501479 °
				-121.719710 °	-121.719710 °
DWR ID	DWR_MA0013_01_s_2014_31				
Action/Comments					

Inspector Comments: FS\_ID:25135

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing 7/15/2013. Slopes have been cleared of vegetation and are in good condition.

There were no apparent signs of settling. LS screw gate is still damaged 2/2/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 9.8 feet below the crown. Flap gate on the waterward end.

Slide gate on the landward end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.10).

FS Date: 12/10/2013 8:45:47 AM

Photo 1 of 1 : UCIP\_4490.jpg



LS slope cleared of vegetation

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	7.33	Rating **	M	Issue No.	32
LM End	7.33	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.498845 °	39.498845 °
				-121.722440 °	-121.722440 °
DWR ID	DWR_MA0013_01_s_2014_32				

Photo 1 of 1 : UCIP\_4492.jpg



Action/Comments					
Inspector Comments: FS_ID:25136					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent 2/2/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 11.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.34).					
FS Date: 12/10/2013 8:48:11 AM					

View of LS slide gate.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	8.12	Rating **	M	Issue No.	33
LM End	8.12	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.489061 °	39.489061 °
				-121.729430 °	-121.729430 °
DWR ID	DWR MA0013 01 s 2014 33				

Photo 1 of 1 : UCIP\_4513.jpg



Action/Comments					
Inspector Comments: FS_ID:25145					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Sediment build up against flashboards. Flashboards are in use on landside of levee 7/15/2013 Same as last inspection 12/3/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 8.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.12).					
FS Date: 12/10/2013 9:03:31 AM					

View of WS slope and toe.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	8.40	Rating **	M	Issue No.	34
LM End	8.40	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.485432 °	39.485432 °
				-121.731590 °	-121.731590 °
DWR ID	DWR_MA0013_01_s_2014_34				
Action/Comments					
Inspector Comments: FS_ID:25146					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment2/3/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through the levee, 9.3 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.40).					
FS Date: 12/10/2013 9:07:06 AM					

Photo 1 of 1 : UCIP\_4517.jpg



View of WS flap gate and headwall.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	8.95	Rating **	M	Issue No.	35
LM End	8.95	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.478573 °	39.478573 °
				-121.736550 °	-121.736550 °
DWR ID	DWR_MA0013_01_s _ 2014_35				
Action/Comments					
Inspector Comments: FS_ID:25147					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder 7/15/2013 Same as last inspection 12/3/2013 Same as last inspection.					
FIELD_STRUCT_DESC: Richvale Irrigation Canal siphon crosses the channel. Five (5) by seven (7) foot concrete conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on waterward side. Concrete headwall on the landward side. 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.95).					
FS Date: 12/10/2013 9:11:21 AM					

Photo 1 of 1 : UCIP\_4521.jpg



Catwalk and screw gate located on WS.

LM Start	9.84	Rating **	M	Issue No.	5
LM End	9.87	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.467170 °	39.466860 °
				-121.743887 °	-121.744108 °
DWR ID	DWR_MA0013_01_s _ 2012_5				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : rduffey\_s\_20140428\_237.jpg



Trim the trees along the landside slope and toe.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	9.89	Rating **	M	Issue No.	10
LM End	9.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.466635 °	39.466635 °
				-121.744228 °	-121.744228 °
DWR ID	DWR_MA0013_01_f_2013_10				
Action/Comments					
Material					

Photo 1 of 1 : rduffey\_s\_20140304\_441.jpg



View of a trailer &amp; material along the L/S toe.

LM Start	11.20	Rating **	M	Issue No.	17
LM End	13.47	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.449777 °	39.421255 °
				-121.755103 °	-121.774893 °
DWR ID	DWR_MA0013_01_s_2012_17				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_444.jpg



View of the agricultural ditch along the toe of the levee.

LM Start	11.75	Rating **	M	Issue No.	11
LM End	11.76	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			39.442821 °	39.442738 °
				-121.759851 °	-121.759908 °
DWR ID					
Action/Comments					
Inspector Comments: 2011 - Small erosion pocket likely caused by irrigation diversion structure. 2013: Site is part of the extended inventory, last inspected 2011. [2013 Site ID: CHK_11-7_R]					

No Photos

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	12.36	Rating **	M	Issue No.	36
LM End	12.36	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.435169 °	39.435169 °
				-121.765290 °	-121.765290 °
DWR ID	DWR_MA0013_01_s_2014_36				
Action/Comments					

**Action/Comments**

Inspector Comments: FS\_ID:25161

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylight after WS slope is cleared 7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe 4/2/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 11.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 12.38).

FS Date: 12/10/2013 9:30:54 AM

Photo 1 of 1 : UCIP\_4529.jpg



Overview of levee crown at crossing looking downstream.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	13.50	Rating **	M	Issue No.	37
LM End	13.50	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.420920 °	39.420920 °
				-121.775300 °	-121.775300 °
DWR ID	DWR_MA0013_01_s_2014_37				
Action/Comments					
Inspector Comments: FS_ID:25164 EP_NO: 17030 Repair Type: Crossing Status: UCIP Comments: Attempt to locate this crossing during next inspection when tall grass is cleared from slopes-look for utility marker 7/15/2013 Same as last inspection. Unable to locate any marker 12/3/2013 Unable to locate. FIELD_STRUCT_DESC: Three 2-inch-diameter and Three 1.5-inch-diameter conduits containing fiber optic cables across and under (bored) Cherokee Canal and its levees. The permit indicates the conduits must be bored at least 5-feet below the bottom of the low flow of the channel. (Permit No. 17030-2000) FS Date: 12/10/2013 9:35:42 AM					

No Photos

LM Start	13.96	Rating **	M	Issue No.	38
LM End	13.96	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.416833 °	39.416833 °
				-121.781930 °	-121.781930 °
DWR ID	DWR_MA0013_01_s_2014_38				
Action/Comments					
Inspector Comments: FS_ID:25166					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Tree has fallen at LS inlet and damaged slide gate.					
The tree needs to be removed and screw gate repaired. Limited					
inspection on LS due to fallen tree 7/15/2013 Same as last					
inspection 12/3/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal drainpipe through					
the levee, 12.7 feet below the crown. Flap gate on the waterward side.					
Concrete "U" headwall on both ends (USACE-1960).					
FS Date: 12/10/2013 9:38:13 AM					

Photo 1 of 1 : UCIP\_4534.jpg



WS headwall and flap gate.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	13.97	Rating **	M	Issue No.	39
LM End	13.97	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.416756 °	39.416756 °
				-121.782060 °	-121.782060 °
DWR ID	DWR_MA0013_01_s_2014_39				
Action/Comments					
Inspector Comments: FS_ID:25167					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Non-functional crossing-buried slide gate on WS.					
Limited inspection on WS and LS slope/toe due to dense vegetation.					
Need photo of cleared WS & LS slopes or toe. This crossing is listed in					
the USACE periodic inspection report as Corp's Inspection ID#					
USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS					
slope 7/15/2013 Same as last inspection 12/3/2013 Same as last					
inspection.					
FIELD_STRUCT_DESC: Abandoned 12 inch steel drainpipe through					
the levee, 3 feet below the crown. Gate valve on the waterward slope.					
1/4-inch steel plate welded on both ends (USACE-1960). This entry					
matches the Drainage or Irrigation Structure referenced in O&M manual					
(HLM 13.97).					
FS Date: 12/10/2013 9:53:10 AM					

Photo 1 of 1 : UCIP\_4536.jpg



Buried slide gate on the WS slope.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	14.79	Rating **	M	Issue No.	40
LM End	14.79	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.409481 °	39.409481 °
				-121.794010 °	-121.794010 °
DWR ID	DWR MA0013 01 s 2014 40				

Action/Comments					
Inspector Comments: FS_ID:25168					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open 12/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open 12/3/2013					
Same as last inspection.					
FIELD_STRUCT_DESC: 36-inch corrugated metal drainpipe through the levee, 12.9 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 14.79).					
FS Date: 12/10/2013 9:56:15 AM					

Photo 1 of 1 : UCIP\_4542.jpg



LS slope cleared of vegetation

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	15.99	Rating **	M	Issue No.	41
LM End	15.99	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.398615 °	39.398615 °
				-121.811250 °	-121.811250 °
DWR ID	DWR_MA0013_01_s_2014_41				
Action/Comments					
Inspector Comments: FS_ID:25171					
EP_NO: 11805B					
Repair Type:					
Crossing Status:					
UCIP Comments: LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slope3/15/2013 Same as last inspection12/3/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 48-inch diameter reinforced concrete pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on waterward side of levee. Revetment on waterward slope. Irrigation ditch on the landward side. (Permit No. 11805B-1979)					
FS Date: 12/10/2013 10:38:48 AM					

Photo 1 of 1 : UCIP\_4546.jpg



WS view of catwalk, slide/screw gate, and headwall

LM Start	16.45	Rating **	M	Issue No.	7
LM End	17.42	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.394523 °	39.385580 °
				-121.817630 °	-121.831282 °
DWR ID	DWR_MA0013_01_s_2012_7				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_440.jpg



View of the ag along the toe of the levee.

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	17.42	Rating **	M	Issue No.	42
LM End	17.42	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.385540 °	39.385540 °
				-121.831280 °	-121.831280 °
DWR ID	DWR_MA0013_01_s _ 2014_42				
Action/Comments					
Inspector Comments: FS_ID:25173					
EP_NO: 3511					
Repair Type:					
Crossing Status:					
UCIP Comments: Unable to determine if cable is still in use, per permit records indicate communication cable was installed in 1961, 1968					
USACE requested to abandon line, 1974 USACE communication is not abandoned. Cable crosses multiple levees7/15/2013 Same as last inspection. Unable to locate12/3/2013 Unable to locate.					
FIELD_STRUCT_DESC: U.S. Army communication cable through the levee, 3.0 feet below the crown. (Permit No. 3511-1961)					
FS Date: 12/10/2013 10:40:42 AM					

No Photos

LM Start	17.71	Rating **	M	Issue No.	9
LM End	17.75	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.382943 °	39.382635 °
				-121.835447 °	-121.836012 °
DWR ID	DWR_MA0013_01_s _ 2012_9				
Action/Comments					
Ditch					

No Photos

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.87	03/20/2014 03/20/2014	Bob Duffey

LM Start	17.72	Rating **	M	Issue No.	15
LM End	18.20	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.382852 °	39.378481 °
				-121.835654 °	-121.842394 °
DWR ID	DWR_MA0013_01_s _ 2012_15				
Action/Comments					
Ditch					

No Photos

**\* 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**

**Unit Cover Sheet**

**Spring 2014 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway			Bank	Unit Miles
Unit No. 02 Cherokee Canal			Left	23.10
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	03/25/2014 - 03/25/2014			
DWR Inspector	Bob Duffey			
Accompanied By	Jason Cooper Sutter Maintenance Yard			

**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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	0.05	Rating **	M	Issue No.	1
LM End	0.15	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.573523 °	39.572455 °
				-121.701387 °	-121.702370 °
DWR ID	DWR_MA0013_02_s _ 2012_1				
Action/Comments					
Equipment					

No Photos

LM Start	0.58	Rating **	M	Issue No.	9
LM End	0.58	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.566479 °	39.566479 °
				-121.702430 °	-121.702430 °
DWR ID	DWR_MA0013_02_s _ 2014_9				
Action/Comments					
Inspector Comments: FS_ID:25344					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken12/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.57).					
FS Date: 12/11/2013 7:25:30 AM					

Photo 1 of 1 : UCIP\_4568.jpg



WS slope clear of vegetation

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	1.71	Rating **	M	Issue No.	10
LM End	1.71	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.551178 °	39.551178 °
				-121.705660 °	-121.705660 °
DWR ID	DWR_MA0013_02_s_2014_10				
Action/Comments					

Inspector Comments: FS\_ID:25346

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0108 for WS flap gate filled with soil and LS gate not functioning because of overgrown vegetation. 7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening. 2/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch CM drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. Slide gate at the landward toe in headwall (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.70). In 1962, permit number 3953 was issued for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed.

FS Date: 12/11/2013 7:43:19 AM

Photo 1 of 1 : UCIP\_4573.jpg



View of LS slide gate.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	2.55	Rating **	M	Issue No.	11
LM End	2.55	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.539195 °	39.539195 °
				-121.706070 °	-121.706070 °
DWR ID	DWR_MA0013_02_s _ 2014_11				

**Action/Comments**

Inspector Comments: FS\_ID:25347

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Handle missing on slide gate 7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing 2/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch corrugated metal pipes through the levee, 9.7 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.54).

FS Date: 12/11/2013 7:44:44 AM

Photo 1 of 1 : UCIP\_4578.jpg



Headwall and screw gates (2) located on land side of levee. Missing handle on screw gate 1 of 2.

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	2.64	Rating **	M	Issue No.	14
LM End	2.64	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.537864 °	39.537864 °
				-121.706190 °	-121.706190 °
DWR ID	DWR_MA0013_02_s_2014_14				
Action/Comments					

Inspector Comments: FS\_ID:25349

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Minor sediment built up on LS, remove sediment.

Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0148 for LS gate obstructed by vegetation and WS flap gate is not functioning (propped open) 7/10/2013 Same as last inspection 2/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). Structure used to drain water from Nelson Shippe Road. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.63).

FS Date: 12/11/2013 7:47:31 AM

Photo 1 of 1 : UCIP\_4585.jpg



Headwall and screw gate located on land side of levee.

<b>* Location</b>	<b>** Rating</b>		<b>+ Issue Type</b>
LS : Land Side	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**

**Levee Inspection Report By Mile - Spring 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	3.62	Rating **	M	Issue No.	15
LM End	3.62	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523829 °	39.523829 °
				-121.706290 °	-121.706290 °
DWR ID	DWR_MA0013_02_s_2014_15				
Action/Comments					

Inspector Comments: FS\_ID:25353

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0172 for no access to WS gate due to high water & dense vegetation. 7/10/2103 LS and WS slopes have been cleared of vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected 12/9/2013 LS slide gate is completely buried by soil and WS flapgate is blocked from opening by sediment. Crossing appears abandoned and non-functional. FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee, 11.5 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.61)

FS Date: 12/11/2013 8:00:26 AM

Photo 1 of 1 : UCIP\_4590.jpg



LS slide gate shown is buried in sediment.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	3.68	Rating **	M	Issue No.	16
LM End	3.68	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523556 °	39.523556 °
				-121.705340 °	-121.705340 °
DWR ID	DWR_MA0013_02_s _ 2014_16				
Action/Comments					
Inspector Comments: FS_ID:25354					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected2/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through levee, 9.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.67).					
FS Date: 12/11/2013 8:20:35 AM					

Photo 1 of 1 : UCIP\_4596.jpg



Headwall and flap gate located on water side of levee

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	3.86	Rating **	M	Issue No.	17
LM End	3.86	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.524350 °	39.524350 °
				-121.702180 °	-121.702180 °
DWR ID	DWR_MA0013_02_s _ 2014_17				
Action/Comments					
Inspector Comments: FS_ID:25355					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate 7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks 12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing. FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.85).					
FS Date: 12/11/2013 8:22:27 AM					

Photo 1 of 1 : UCIP\_4599.jpg



On the LS unable to evaluate the LS slope around headwall due to dense vegetation.

LM Start	4.58	Rating **	M	Issue No.	911
LM End	5.00	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.526858 °	39.537468 °
				-121.689360 °	-121.690882 °
DWR ID	DWR_MA0013_02_s _ 2012_911				
Action/Comments					
Garbage					

Photo 1 of 1 : rduffey\_s\_20140304\_479.jpg



View of agricultural ditch along the toe.

**\* Location**

LS : Land Side  
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**

**Levee Inspection Report By Mile - Spring 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	5.06	Rating **	M	Issue No.	22
LM End	5.06	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.526298 °	39.526298 °
				-121.688320 °	-121.688320 °
DWR ID	DWR_MA0013_02_s_2014_22				
Action/Comments					
Inspector Comments: FS_ID:25358					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow. 7/9/2013 Same as last inspection. 12/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 8.6 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.06).					
FS Date: 12/11/2013 8:29:56 AM					

Photo 1 of 1 : UCIP\_4610.jpg



Headwall and flap gate located on water side of levee

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	5.08	Rating **	M	Issue No.	23
LM End	5.08	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.526400 °	39.526400 °
				-121.688610 °	-121.688610 °
DWR ID	DWR_MA0013_02_s_2014_23				
Action/Comments					

Inspector Comments: FS\_ID:25359

EP\_NO: N/A

Repair Type:

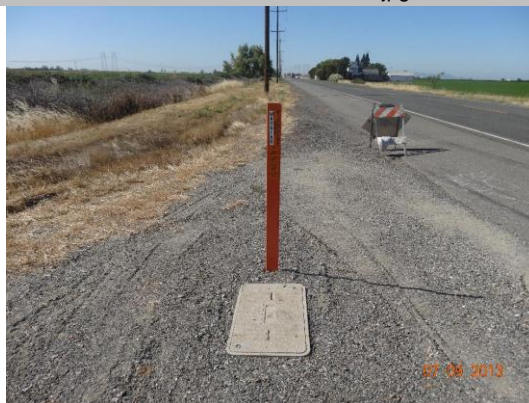
Crossing Status:

UCIP Comments: Markers not present or visible for hazard line (Health & Safety Issue) unknown depth. Owner is not compliant with Title 23. USA flag located on LS however not visible. No permanent markers available only underground service alert (USA) flags. Active line? Will need to contact PG&E and find out the status of line through levee 7/9/2013 New carsonite marker installed with concrete access box on LS about 10 feet east of highway 99. Depth is still unknown 12/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 6 inch steel gas line through the levee unknown depth. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.08).

FS Date: 12/11/2013 8:32:14 AM

Photo 1 of 1 : UCIP\_4616.jpg



New carsonite gas line marker

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	5.34	Rating **	M	Issue No.	24
LM End	5.34	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.525958 °	39.525958 °
				-121.692730 °	-121.692730 °
DWR ID	DWR_MA0013_02_s _ 2014_24				
Action/Comments					
Inspector Comments: FS_ID:25362					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate 7/9/2013 Same as last inspection 12/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 5.8 feet below the crown. Flap gate on the waterward side. Slide gate on the landward side. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.34).					
FS Date: 12/11/2013 8:48:20 AM					

Photo 1 of 1 : UCIP\_4618.jpg



Headwall and screw gate located on land side of levee

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	5.40	Rating **	M	Issue No.	25
LM End	5.40	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.525361 °	39.525361 °
				-121.693630 °	-121.693630 °
DWR ID	DWR MA0013 02 s 2014 25				

**Action/Comments**

Inspector Comments: FS\_ID:25363

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS/9/2013 Same as last inspection 12/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterward end. Open on the landward end. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.41).

FS Date: 12/11/2013 8:51:58 AM

Photo 1 of 1 : UCIP\_4622.jpg



Irrigation crossing located on land side of levee

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	5.85	Rating **	M	Issue No.	26
LM End	5.85	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523381 °	39.523381 °
				-121.701270 °	-121.701270 °
DWR ID	DWR_MA0013_02_s _ 2014_26				
Action/Comments					
Inspector Comments: FS_ID:25364					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Slide gate missing on WS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0017 for missing slide gate 7/9/2013 Same as last inspection 12/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 9.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.85).					
FS Date: 12/11/2013 8:55:37 AM					

Photo 1 of 1 : UCIP\_4625.jpg



Headwall and damaged/missing screw gate on land side of levee

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	5.86	Rating **	M	Issue No.	27
LM End	5.86	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523370 °	39.523370 °
				-121.701330 °	-121.701330 °
DWR ID	DWR_MA0013_02_s _ 2014_27				
Action/Comments					
Inspector Comments: FS_ID:25365					
EP_NO: 13170					
Repair Type:					
Crossing Status:					
UCIP Comments: Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0058 for high water unable to see crossing 7/9/2013 Same as last inspection 12/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 36 inch corrugated metal pipe through the levee approximately 7 feet below crown. Flap gate is located on the waterward side. (13170-1981)					
FS Date: 12/11/2013 9:03:13 AM					

Photo 1 of 1 : UCIP\_4631.jpg



Headwall and screw gate on land side of levee

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	<b>6.12</b>	Rating **	M	Issue No.	<b>28</b>
LM End	<b>6.12</b>	Issue Type +	En	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.522513 °	39.522513 °	
			-121.706010 °	-121.706010 °	

No Photos

DWR ID	DWR_MA0013_02_s _ 2014_28
Action/Comments	
Inspector Comments: FS_ID:25366 EP_NO: N/A Repair Type: Crossing Status: UCIP Comments: Limited inspection on WS slope due to dense vegetation. Need photos of WS slope when cleared. Unable to find WS daylight point 7/9/2013 Same as last inspection 12/9/2013 Same as last inspection. FIELD_STRUCT_DESC: 1 of 3: Western Canal siphon crosses the channel. 8-foot by 10-foot concrete conduits through the levee. Top of concrete conduit 4 feet below the crown. Catwalk and guardrails around headwall (USACE-1960). Debris catchment line located at the wings of the headwall. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.13). FS Date: 12/11/2013 9:04:53 AM	

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	<b>6.12</b>	Rating **	M	Issue No.	<b>29</b>
LM End	<b>6.12</b>	Issue Type +	En	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.522488 °	39.522488 °	
			-121.706030 °	-121.706030 °	

No Photos

DWR ID	DWR_MA0013_02_s _ 2014_29				
Action/Comments					
Inspector Comments: FS_ID:25367					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Limited inspection on WS slope due to dense vegetation. Need photo of WS slope when cleared. Unable to find WS outlet 7/9/2013 Same as last inspection 12/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 2 of 3: Western Canal siphon crosses the channel. 8-foot by 10-foot concrete conduits through the levee. Top of concrete conduit 4 feet below the crown. Catwalk and guardrails around headwall (USACE-1960). Debris catchment line located at the wings of the headwall. All conduits are open. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.13).					
FS Date: 12/11/2013 9:16:47 AM					

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	6.13	Rating **	M	Issue No.	30
LM End	6.13	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.522457 °	39.522457 °
				-121.706030 °	-121.706030 °
DWR ID	DWR_MA0013_02_s _ 2014_30				
Action/Comments					
Inspector Comments: FS_ID:25368					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Limited inspection on WS slope due to dense vegetation. Need photo of WS slope when cleared. Unable to find WS outlet 7/9/2013 Same as last inspection 12/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 3 of 3: Western Canal siphon crosses the channel. 8-foot by 10-foot concrete conduits through the levee. Top of concrete conduit 4 feet below the crown. Catwalk and guardrails around headwall (USACE-1960). Debris catchment line located at the wings of the headwall. All conduits are open. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.13).					
FS Date: 12/11/2013 9:17:41 AM					

No Photos

LM Start	6.18	Rating **	M	Issue No.	55
LM End	6.18	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.521634 °	39.521634 °
				-121.706184 °	-121.706184 °
DWR ID	DWR_MA0013_02_s _ 2014_55				
Action/Comments					
Tree or limb					

Photo 1 of 1 : rduffey\_s\_20140428\_215.jpg



View of the tree limbs on the landside slope and toe.

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	6.23	Rating **	M	Issue No.	12
LM End	7.62	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.520843 °	39.502958 °
				-121.706345 °	-121.716953 °
DWR ID	DWR_MA0013_02_s _ 2012_12				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_473.jpg



View of the agricultural ditch along the toe.

LM Start	7.24	Rating **	M	Issue No.	31
LM End	7.24	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.507705 °	39.507705 °
				-121.713810 °	-121.713810 °
DWR ID	DWR_MA0013_02_s _ 2014_31				
Action/Comments					
Inspector Comments: FS_ID:25370					
EP_NO: 5200B					
Repair Type:					
Crossing Status:					
UCIP Comments: No photo available of WS headwall. If possible take photo of WS headwall 7/9/2013 Same as last inspection 12/9/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 8 of 10 items listed under Board Order 5200, 5200A, 5200B: 6-foot by 6-foot reinforced double box culvert (Box 1 of 2) through the levee, 17.1 feet below the crown. Concrete headwalls on both ends. Slide gate on the waterward side. (Permit No. 5200B-1967)					
FS Date: 12/11/2013 9:29:27 AM					

Photo 1 of 1 : UCIP\_4645.jpg



View of double box culvert with hand rail from landside.

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	7.25	Rating **	M	Issue No.	32
LM End	7.25	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.507570 °	39.507570 °
				-121.713870 °	-121.713870 °
DWR ID	DWR_MA0013_02_s _ 2014_32				

No Photos

Action/Comments					
Inspector Comments: FS_ID:25372					
EP_NO: 5200B					
Repair Type:					
Crossing Status:					
UCIP Comments: Not found - Need to verify if there are any signs of the structure during next inspection when slopes are cleared. If not will need to coordinate with applicant regarding the fate of this structure 7/9/2013 Same as last inspection. Unable to locate 12/9/2013 Unable to locate.					
FIELD_STRUCT_DESC: 10 of 10 items listed under Board Order 5200, 5200A, 5200B: 36 inch corrugated metal spill pipe through the levee embankment, unknown depth. (Board Order No. 5200B-1967)					
FS Date: 12/11/2013 9:43:59 AM					

LM Start	9.76	Rating **	M	Issue No.	33
LM End	9.76	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.476260 °	39.476260 °
				-121.736230 °	-121.736230 °
DWR ID	DWR MA0013 02 s 2014 33				

Action/Comments					
Inspector Comments: FS_ID:25389					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information 7/9/2013 Same as last inspection 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: Buried fiber optic line through the levee at depth unknown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601. (Qwest Communication)					
FS Date: 12/11/2013 10:31:41 AM					

Photo 1 of 1 : UCIP\_4651.jpg



Overview of levee crown at crossing.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	9.78	Rating **	M	Issue No.	34
LM End	9.78	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.476140 °	39.476140 °
				-121.736390 °	-121.736390 °
DWR ID	DWR_MA0013_02_s _ 2014_34				
Action/Comments					
Inspector Comments: FS_ID:25390					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspection submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinate 7/9/2013 Same as last inspection 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: High pressure line through levee at depth unknown. Owner of line is Kinder Morgan contact information is 213.624-9461. (Kinder Morgan) Applicant was contacted on 7/20/12 by Olivia. I spoke with Ken Yeo, Sacramento Local Area Manager regarding this crossing and he believes its an 8 inch diameter bored line through channel. His contact info is 916.416.7938 or yeok@kindermorgan.com. For additional inquiries regarding crossing contact Frank Villalovos.					
FS Date: 12/11/2013 10:33:32 AM					

No Photos

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	9.79	Rating **	M	Issue No.	35
LM End	9.79	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.475960 °	39.475960 °
				-121.736540 °	-121.736540 °
DWR ID	DWR_MA0013_02_s _ 2014_35				
Action/Comments					
Inspector Comments: FS_ID:25391					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing 7/9/2013 Same as last inspection 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: Underground cable through the levee at depth unknown. Owner of encroachment is Pacific Telephone.					
FS Date: 12/11/2013 10:40:35 AM					

No Photos

LM Start	9.99	Rating **	M	Issue No.	36
LM End	9.99	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.473410 °	39.473410 °
				-121.738190 °	-121.738190 °
DWR ID	DWR_MA0013_02_s _ 2014_36				
Action/Comments					
Inspector Comments: FS_ID:25392					
EP_NO: 16994					
Repair Type:					
Crossing Status:					
UCIP Comments: Unable to find any indicators for this crossing. It appears that this encroachment was not built. Check again during next inspection 7/9/2013 Same as last inspection. Unable to locate any signs of this crossing 2/4/2013 Unable to locate.					
FIELD_STRUCT_DESC: 10 inch diameter HDPE conduit containing fiber-optic cables across and under (bored) Cherokee Canal and its levees. Twelve 1.5 inch PVC inner ducts through casing with hand holes placed at each end for initial and future installation of fiber optic telecommunications cable. (Permit No. 16994-2000, Level 3 Comm)					
FS Date: 12/11/2013 10:43:50 AM					

No Photos

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	10.14	Rating **	M	Issue No.	13
LM End	10.64	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.471517 °	39.465113 °
				-121.739433 °	-121.743592 °
DWR ID	DWR_MA0013_02_s _ 2012_13				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_474.jpg



View of the agricultural ditch along the toe.

LM Start	10.63	Rating **	A	Issue No.	54
LM End	10.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.465220 °	39.465220 °
				-121.743521 °	-121.743521 °
DWR ID	DWR_MA0013_02_s _ 2014_54				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : rduffey\_s\_20140428\_216.jpg



View of the native grasses on both slopes.

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	10.67	Rating **	M	Issue No.	37
LM End	10.67	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.464710 °	39.464710 °
				-121.743810 °	-121.743810 °
DWR ID	DWR_MA0013_02_s _ 2014_37				
Action/Comments					
Inspector Comments: FS_ID:25403					
EP_NO: 1238					
Repair Type:					
Crossing Status:					
UCIP Comments: Permit was approved for 6-5/8 inch diameter not 8 inch. The permit granted permission to construct pipe to cross Cherokee Canal, Butte Creek, Clear Creek, & Ash Creek. The O&M manual list an 8 inch steel gas line at HLM 10.67, unable to determine if the gas line is the same crossing. Will need to contact applicant to obtain record 3/8/2013 Same as last inspection 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 8-inch gas pipe through the levee at unknown elevation. (Permit No. 1238-1947) Utility marker visible at the upstream face of highway bridge. Buried utility crosses bridge and crosses left bank of Cherokee Canal downstream of highway bridge. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 10.67).					
FS Date: 12/11/2013 12:09:35 PM					

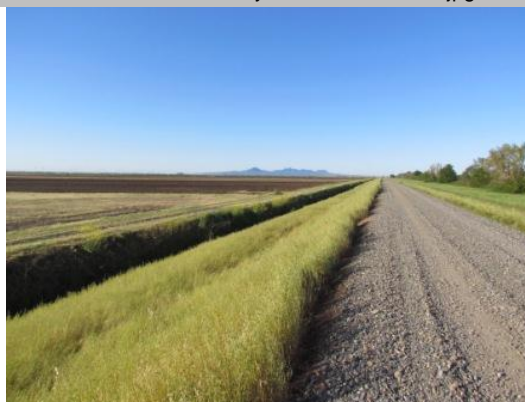
Photo 1 of 1 : UCIP\_4661.jpg



Utility marker is located near the upstream face of the highway bridge.

LM Start	10.70	Rating **	M	Issue No.	18
LM End	11.79	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.464305 °	39.450333 °
				-121.744172 °	-121.753157 °
DWR ID	DWR_MA0013_02_s _ 2012_18				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_475.jpg



View of the agricultural ditch along the toe.

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	13.03	Rating **	M	Issue No.	38
LM End	13.03	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.434779 °	39.434779 °
				-121.763940 °	-121.763940 °
DWR ID	DWR_MA0013_02_s _ 2014_38				
Action/Comments					
Inspector Comments: FS_ID:25405					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 13.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Slide gate in ditch on the landward side. Pipe under channel is a 24-inch Delleher siphon (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.03).					
FS Date: 12/11/2013 12:11:25 PM					

Photo 1 of 1 : UCIP\_4664.jpg



Overview of crossing looking downstream at the left bank of Cherokee Canal.

LM Start	13.55	Rating **	M	Issue No.	19
LM End	14.10	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.428192 °	39.406240 °
				-121.768443 °	-121.794863 °
DWR ID	DWR_MA0013_02_s _ 2012_19				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_476.jpg



View of the agricultural ditch along the toe.

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	15.62	Rating **	M	Issue No.	39
LM End	15.62	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.419209 °	39.419209 °
				-121.773680 °	-121.773680 °
DWR ID	DWR_MA0013_02_s_2014_39				
Action/Comments					

Inspector Comments: FS\_ID:25407

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0011 for WS gate blocked by vegetation 7/8/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unable to locate LS headwall 12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal pipe through the levee, 10.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.62).

FS Date: 12/11/2013 12:14:33 PM

Photo 1 of 1 : UCIP\_4675.jpg



WS slope cleared of vegetation

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	15.86	Rating **	M	Issue No.	40
LM End	15.86	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.417043 °	39.417043 °
				-121.777240 °	-121.777240 °
DWR ID	DWR_MA0013_02_s _ 2014_40				
Action/Comments					
Inspector Comments: FS_ID:25408					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue 7/8/2013 Same as last inspection 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 24-inch corrugated metal pipe through the levee, 9.0 feet below the crown. Flap gate on waterward end.					
Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.87).					
FS Date: 12/11/2013 12:16:38 PM					

Photo 1 of 1 : UCIP\_4678.jpg



View of WS headwall.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	16.25	Rating **	M	Issue No.	41
LM End	16.25	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.413595 °	39.413595 °
				-121.782890 °	-121.782890 °
DWR ID	DWR_MA0013_02_s _ 2014_41				
Action/Comments					

Inspector Comments: FS\_ID:25409

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under separate permit. 7/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtenances in good condition 12/4/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. Pipe discharges into distribution box on the waterside. Divers on dam in stream. Pump located on the waterward berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the landward field. Provision can be made to send water over streambed to irrigation overflow area (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in the O&M manual (HLM 16.26).

FS Date: 12/11/2013 12:17:26 PM

Photo 1 of 1 : UCIP\_4683.jpg



WS view of crossing.

LM Start	17.05	Rating **	M	Issue No.	20
LM End	18.93	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments				° 39.389187 °
					° -121.821233 °
DWR ID	DWR_MA0013_02_s _ 2012_20				
Action/Comments					

Ditch

Photo 1 of 1 : rduffey\_s\_20140304\_477.jpg



View of the agricultural ditch along the toe.

**\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	17.06	Rating **	M	Issue No.	42
LM End	17.06	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.406410 °	39.406410 °	
			-121.794600 °	-121.794600 °	

No Photos

DWR ID	DWR_MA0013_02_s_2014_42
Action/Comments	
Inspector Comments: FS_ID:25410 EP_NO: N/A Repair Type: Crossing Status: UCIP Comments: Dense vegetation limited inspection will need to verify is an features are still present at this location during the next inspection 7/8/2013 Same as last inspection. Unable to locate 2/4/2013 Unable to locate. FIELD_STRUCT_DESC: 36 inch corrugated metal pipe through the levee at approximately 14.5 feet below crown. There is a flapgate located on the waterward side. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 17.06). FS Date: 12/11/2013 12:19:21 PM	

LM Start	17.06	Rating **	M	Issue No.	43
LM End	17.06	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.406401 °	39.406401 °	
			-121.794640 °	-121.794640 °	

DWR ID	DWR_MA0013_02_s_2014_43
Action/Comments	
Inspector Comments: FS_ID:25411	
EP_NO: N/A	
Repair Type:	
Crossing Status:	
UCIP Comments: Dense vegetation on the slopes restricted the field inspection at this crossing. Need photos of cleared WS and LS slopes, and appurtance 7/8/2013 Same as last inspection 12/4/2013 Same as last inspection.	
FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 14.7 feet below the crown. Flap gate on the waterward end. Walkway and slide gate located on the landward end. Concrete "U" headwalls on both end (USACE-1960).	
FS Date: 12/11/2013 12:24:23 PM	

Photo 1 of 1 : UCIP\_4691.jpg



Walkway and slide gate located on LS.

* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	17.55	Rating **	C	Issue No.	5
LM End	17.66	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.401937 °	39.400881 °
				-121.801512 °	-121.803139 °
DWR ID	DWR_MA0013_02_s _ 2013_5				
Action/Comments					
Tree or limb					

No Photos

LM Start	18.37	Rating **	M	Issue No.	44
LM End	18.37	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.394406 °	39.394406 °
				-121.813180 °	-121.813180 °
DWR ID	DWR_MA0013_02_s _ 2014_44				
Action/Comments					
Inspector Comments: FS_ID:25412					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS/8/2013 LS slope cleared of vegetation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size 2/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee, 13.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 18.37).					
FS Date: 12/11/2013 12:38:45 PM					

Photo 1 of 1 : UCIP\_4698.jpg



View of LS headwall.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	19.58	Rating **	M	Issue No.	21
LM End	20.15	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.383252 °	39.378192 °
				-121.830565 °	-121.838543 °
DWR ID	DWR_MA0013_02_s _ 2012_21				
Action/Comments					
Ditch					

Photo 1 of 1 : rduffey\_s\_20140304\_478.jpg



View of the agricultural ditch along the toe.

LM Start	20.15	Rating **	M	Issue No.	45
LM End	20.15	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.378198 °	39.378198 °
				-121.838570 °	-121.838570 °
DWR ID	DWR_MA0013_02_s _ 2014_45				
Action/Comments					

Photo 1 of 1 : UCIP\_4706.jpg



View of LS headwall. LS slope covered with dense vegetation.

Inspector Comments: FS\_ID:25416  
 EP\_NO: N/A  
 Repair Type:  
 Crossing Status:  
 UCIP Comments: Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection 7/8/2013. Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape 12/4/2013. Same as last inspection.  
 FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 13.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 20.15).  
 FS Date: 12/11/2013 12:44:38 PM

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	20.53	Rating **	M	Issue No.	53
LM End	20.53	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.374102 °	39.374102 °
				-121.843086 °	-121.843086 °
DWR ID	DWR_MA0013_02_s _ 2014_53				
Action/Comments					
Tree or limb					

Photo 1 of 1 : rduffey\_s\_20140428\_218.jpg



View of the tree limbs along the waterside slope and toe.

LM Start	20.72	Rating **	M	Issue No.	6
LM End	20.99	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.372724 °	39.370732 °
				-121.846022 °	-121.850282 °
DWR ID	DWR_MA0013_02_s _ 2013_6				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : rduffey\_s\_20140304\_470.jpg



Trim the trees 5 feet to allow visibility along the landside slope.

LM Start	20.89	Rating **	M	Issue No.	52
LM End	20.89	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.371433 °	39.371433 °
				-121.848753 °	-121.848753 °
DWR ID	DWR_MA0013_02_s _ 2014_52				
Action/Comments					
Tree or limb					

Photo 1 of 1 : rduffey\_s\_20140428\_219.jpg



View of the tree limbs along the waterside toe.

**\* Location**

LS : Land Side  
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**

**Levee Inspection Report By Mile - Spring 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	21.00	Rating **	M	Issue No.	46
LM End	21.00	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.370676 °	39.370676 °
				-121.850490 °	-121.850490 °
DWR ID	DWR_MA0013_02_s_2014_46				

**Action/Comments**

Inspector Comments: FS\_ID:25417

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: LS pipe collars severely damaged--section missing. Buried section of pipe could be in the same condition. Crossing needs to be repair will need to coordinate with applicant. WS slide gate handle missing 7/8/2013 Same as last inspection 12/4/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 3: 16-inch steel pipes encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 12/11/2013 12:46:19 PM

Photo 1 of 1 : UCIP\_4709.jpg



Corrugated metal pipe risers with slide gates located on WS slope.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	21.00	Rating **	M	Issue No.	47
LM End	21.00	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.370679 °	39.370679 °
				-121.850500 °	-121.850500 °
DWR ID	DWR_MA0013_02_s_2014_47				
Action/Comments					
Inspector Comments: FS_ID:25418					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: LS pipe collars severely damaged--section missing.					
Crossing needs repair. Will need to coordinate with owner 7/8/2013					
Same as last inspection 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 2 of 3: 16-inch steel pipe encased in					
reinforced concrete through the levee, 9.7 feet below the crown.					
Concrete "U" headwall on both ends. Slide gates on corrugated metal					
pipe risers on the waterward slope. Pump structure on the waterward					
end (USACE-1960). This entry matches the Drainage or Irrigation					
Structure referenced in O&M manual (HLM 21.00).					
FS Date: 12/11/2013 12:52:44 PM					

No Photos

LM Start	21.00	Rating **	M	Issue No.	48
LM End	21.00	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.370679 °	39.370679 °
				-121.850500 °	-121.850500 °
DWR ID	DWR_MA0013_02_s_2014_48				
Action/Comments					
Inspector Comments: FS_ID:25419					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Sink hole present on WS. LS pipe collars severely damaged--section missing. Crossing needs repair. Need to coordinate with owner 7/8/2013 Same as last inspection 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 3 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).					
FS Date: 12/11/2013 12:54:28 PM					

No Photos

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	21.60	Rating **	M	Issue No.	49
LM End	21.60	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.366155 °	39.366155 °
				-121.859880 °	-121.859880 °
DWR ID	DWR_MA0013_02_s_2014_49				

**Action/Comments**

Inspector Comments: FS\_ID:25420

EP\_NO: N/A

Repair Type:

Crossing Status:

UCIP Comments: Needs repair. Internal piping, severe corrosion.

Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13E\_2011\_p\_0234 for no WS gate but sluice gate present

7/8/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more details on repair

2/4/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle.

Slide gate in corrugated metal pipe riser on the waterward slope. Pipe crosses the channel (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.60).

Corroded section of existing pipe, 9-feet 8-inches of an 18-inch CMP section, was replaced under Permit 7231 prior to 1974.

FS Date: 12/11/2013 12:55:43 PM

Photo 1 of 1 : UCIP\_4736.jpg



View of LS slope and pipe inlet.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	22.11	Rating **	M	Issue No.	50
LM End	22.11	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.362103 °	39.362103 °
				-121.867820 °	-121.867820 °
DWR ID	DWR_MA0013_02_s_2014_50				
Action/Comments					
Inspector Comments: FS_ID:25424					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Unauthorized Encroachment. This crossing is listed multiple times in the USACE Periodic Inspection report as USACE_CESPK_M13E_2011_p_0307, 0315, 0317, 0318 for slope failure on LS hinge. DWR-Flood Maintenance Office records shows that CVFPB has requested AT&T to remove conduit in June 2, 2009 letter. LMA working with CVFPB to resolve 7/8/2013 Same as last inspection 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: Illegal encroachment. Underground telephone cable through the levee. Depth unknown. (AT&T) START latitude 39.36210336, longitude -121.8678207 END latitude 39.35458541, longitude -121.8823409. Line extends from Gridley Colusa Highway to the south end of project levee along LS shoulder & levee crown hinge point. Levee sloughs along cable trench after heavy rains.					
FS Date: 12/11/2013 1:00:43 PM					

Photo 1 of 1 : UCIP\_4741.jpg



View of utility line located on LS toe.

LM Start	22.38	Rating **	M	Issue No.	4
LM End	22.38	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.359982 °	39.359982 °
				-121.871958 °	-121.871958 °
DWR ID	DWR_MA0013_02_s_2012_4				
Action/Comments					
Landscaping					

Photo 1 of 1 : rduffey\_s\_20140304\_468.jpg



View of landscaping along the toe.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	22.40	Rating **	M	Issue No.	51
LM End	22.40	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.359827 °	39.359827 °
				-121.872300 °	-121.872300 °
DWR ID	DWR_MA0013_02_s_2014_51				
Action/Comments					
Inspector Comments: FS_ID:25427					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Unable to locate LS headwall. Need photo of LS headwall during next inspection 7/8/2013 Same as last inspection.					
Unable to locate LS headwall 12/4/2013 Same as last inspection.					
FIELD_STRUCT_DESC: 30-inch corrugated metal pipe through the levee, 15.3 feet below the crown. Flap gate on the waterward end.					
Concrete "U" headwalls on both ends. This pipe runs on an angle through the levee, then underground along the landward slope to levee mile 22.39 where it enters a ditch on the landward side (USACE-1960).					
FS Date: 12/11/2013 1:03:54 PM					

Photo 1 of 1 : UCIP\_4742.jpg



View of WS slope looking from WS headwall to levee crown.

LM Start	22.42	Rating **	M	Issue No.	8
LM End	22.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.359707 °	39.359707 °
				-121.872555 °	-121.872555 °
DWR ID	DWR_MA0013_02_s_2012_8				
Action/Comments					
Prunings					

Photo 1 of 1 : rduffey\_s\_20140304\_472.jpg



View of the debris &amp; prunings.

\* 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 2014**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	23.10	03/25/2014 03/25/2014	Bob Duffey

LM Start	22.66	Rating **	M	Issue No.	56
LM End	22.66	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.357765 °	39.357765 °
				-121.876378 °	-121.876378 °
DWR ID	DWR_MA0013_02_s _ 2014_56				
Action/Comments					
Tree or limb					

Photo 1 of 1 : rduffey\_s\_20140428\_220.jpg



View of the tree limbs along the waterside slope and toe.

LM Start	22.83	Rating **	M	Issue No.	7
LM End	22.85	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.356498 °	39.356303 °
				-121.879030 °	-121.879417 °
DWR ID	DWR_MA0013_02_s _ 2012_7				
Action/Comments					
Note and monitor erosion site.					

Photo 1 of 1 : rduffey\_s\_20140304\_471.jpg



View of the along the canal.

\* 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