

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|                              |                                  |              |                        |            |          |
|------------------------------|----------------------------------|--------------|------------------------|------------|----------|
| LM Start                     |                                  | Rating **    | A                      | Issue No.  | <b>1</b> |
| LM End                       |                                  | Issue Type + | Ma                     | Location * |          |
| Category                     | Earthen Levee                    |              | GPS Latitude/Longitude |            |          |
|                              |                                  |              | Start                  |            | End      |
| Item                         | Operations & Maintenance Manuals |              |                        | o          |          |
|                              |                                  |              |                        | o          |          |
| DWR ID                       | DWR_MA0013_01_s_2013_1           |              |                        |            |          |
| Comment Code                 |                                  |              |                        |            |          |
| Inspector Comment            |                                  |              |                        |            |          |
| The LMA has the O&M manuals. |                                  |              |                        |            |          |

No Photos

|  |                                |              |                        |            |          |
|--|--------------------------------|--------------|------------------------|------------|----------|
| LM Start   |                                | Rating **    | A                      | Issue No.  | <b>8</b> |
| LM End   |                                | Issue Type + | Ma                     | Location * |          |
| Category   | Earthen Levee                  |              | GPS Latitude/Longitude |            |          |
|  |                                |              | Start                  |            | End      |
| Item   | Emergency Supplies & Equipment |              |                        | o          |          |
|  |                                |              |                        | o          |          |
| DWR ID   | DWR_MA0013_01_s_2013_8         |              |                        |            |          |
| Comment Code   |                                |              |                        |            |          |
| Inspector Comment  |                                |              |                        |            |          |
| The LMA has adequate flood fight supplies and equipment. |                                |              |                        |            |          |

No Photos

|   |                               |              |                        |            |           |
|---|-------------------------------|--------------|------------------------|------------|-----------|
| LM Start  |                               | Rating **    | A                      | Issue No.  | <b>16</b> |
| LM End  |                               | Issue Type + | Ma                     | Location * |           |
| Category  | Earthen Levee                 |              | GPS Latitude/Longitude |            |           |
|   |                               |              | Start                  |            | End       |
| Item  | Flood Preparedness & Training |              |                        | o          |           |
|   |                               |              |                        | o          |           |
| DWR ID  | DWR_MA0013_01_s_2013_16       |              |                        |            |           |
| Comment Code                                    |                               |              |                        |            |           |
| Inspector Comment                               |                               |              |                        |            |           |
| The LMA completed flood fight training in 2018. |                               |              |                        |            |           |

No Photos

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

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|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |              |
|---|-----------------------------------|--------------|----|------------------------|--------------|
| LM Start  | 1.13                              | Rating **    | M  | Issue No.              | 92           |
| LM End  | 1.13                              | Issue Type + | Ma | Location *             |              |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |              |
|   |                                   |              |    | Start                  | End          |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.582147°             | 39.582147°   |
|   |                                   |              |    | -121.700540°           | -121.700540° |
| DWR ID  | 16343                             |              |    |                        |              |
| Comment Code  |                                   |              |    |                        |              |
| Inspector Comment   |                                   |              |    |                        |              |
| DS_ID:16343<br>FS_ID:54938<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/06/2019 Record has been updated from No Action Needed to Non-Urgent, due to unauthorized encroachment. Pipe has been lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Crossing appears to be in good condition.07/14/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/02/2013 Same as last inspection.07/10/2013 Same as last inspection.04/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing.<br>FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)]<br>FS Date: 8/6/2019 8:46:00 AM |                                   |              |    |                        |              |

Photo 1 of 3 : UCIP\_FA\_2019\_54938\_66689.jpg



Overview of levee crown at crossing looking D/S .

|          |      |              |    |            |           |
|----------|------|--------------|----|------------|-----------|
| LM Start | 1.13 | Rating **    | M  | Issue No.  | 92 (cont) |
| LM End   | 1.13 | Issue Type + | Ma | Location * |           |

Photo 2 of 3 : UCIP\_FA\_2019\_54938\_66688.jpg



View of WS headwall and flap gate.

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

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| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |    |                        |                  |  |
|--|-----------------------------------|--------------|----|------------------------|------------------|--|
| LM Start   | <b>1.13</b>                       | Rating **    | M  | Issue No.              | <b>92 (cont)</b> |  |
| LM End   | <b>1.13</b>                       | Issue Type + | Ma | Location *             |                  |  |
| Category   | Supplemental                      |              |    | GPS Latitude/Longitude |                  |  |
|  |                                   |              |    | Start                  | End              |  |
| Item   | DRAFT DWR UCIP LMA Responsibility |              |    | 39.582147°             | 39.582147°       |  |
|  |                                   |              |    | -121.700540°           | -121.700540°     |  |
| DWR ID   | 16343                             |              |    |                        |                  |  |
| Comment Code   |                                   |              |    |                        |                  |  |
| Inspector Comment  |                                   |              |    |                        |                  |  |
| <p>DS_ID:16343<br/>                 FS_ID:54938<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/06/2019 Record has been updated from No Action Needed to Non-Urgent, due to unauthorized encroachment. Pipe has been lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Crossing appears to be in good condition.07/14/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/02/2013 Same as last inspection.07/10/2013 Same as last inspection.04/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing.<br/>                 FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 1.15)]<br/>                 FS Date: 8/6/2019 8:46:00 AM</p> |                                   |              |    |                        |                  |  |

Photo 3 of 3 : UCIP\_FA\_2019\_54938\_66687.jpg



View of WS with pipe in channel.

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

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| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |                        |               |           |
|----------|-----------------------------------|--------------|------------------------|---------------|-----------|
| LM Start | <b>1.59</b>                       | Rating **    | M                      | Issue No.     | <b>93</b> |
| LM End   | <b>1.59</b>                       | Issue Type + | Ma                     | Location *    |           |
| Category | Supplemental                      |              | GPS Latitude/Longitude |               |           |
|          |                                   |              | Start                  | End           |           |
| Item     | DRAFT DWR UCIP LMA Responsibility |              | 39.576883 °            | 39.576883 °   |           |
|          |                                   |              | -121.702770 °          | -121.702770 ° |           |
| DWR ID   | 16831                             |              |                        |               |           |

Comment Code

Inspector Comment

DS\_ID:16831  
 FS\_ID:54939  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/06/2019 Record remains Non-Urgent, need to clarify owner for this crossing. This pipe has been identified as an LMA responsible drainage pipe. However, adjacent property owner has modified the WS outlet by burying the concrete headwall. No permit has been found authorizing the modification to the WS. LMA and adjacent property owner will need to coordinate with the CVFPB to comply with Title 23. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)08/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be. Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).06/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard-AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)  
 04/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)07/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)05/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/02/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 04/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana)  
 FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June

Photo 1 of 3 : UCIP\_FA\_2019\_54939\_66695.jpg



Overview of levee crown at crossing looking downstream.

|  |   |   |
|--|---|---|
| <b>* Location</b><br>LS : Land Side    N/A : Not Applicable<br>WS : Water Side<br>CR : Crown | <b>** Rating</b><br>A : Acceptable<br>M : Minimally Acceptable<br>U : Unacceptable<br>N : Not Inspected/Rated<br>C : Corrected<br>A/W : Acceptable but Monitor & Maintain | <b>+ Issue Type</b><br>Ma : Maintenance Deficiency<br>Ob : Design & System Obsolescence<br>En : Enforcement |
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|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                       |              |           |                        |              |
|--|---------------------------------------|--------------|-----------|------------------------|--------------|
| LM Start   | <b>1.73</b>                           | Rating **    | <b>C</b>  | Issue No.              | <b>13</b>    |
| LM End   | <b>1.73</b>                           | Issue Type + | <b>Ma</b> | Location *             | <b>CR</b>    |
| Category   | Earthen Levee                         |              |           | GPS Latitude/Longitude |              |
|  |                                       |              |           | Start                  | End          |
| Item   | Crown Surface / Depressions / Rutting |              |           | 39.574762°             | 39.574762°   |
|  |                                       |              |           | -121.703145°           | -121.703145° |
| DWR ID   | DWR_MA0013_01_s_2019_13               |              |           |                        |              |
| Comment Code   |                                       |              |           |                        |              |
| C2 : Repair depressions or ruts in the crown or slope. |                                       |              |           |                        |              |
| Inspector Comment                                      |                                       |              |           |                        |              |
|  |                                       |              |           |                        |              |

No Photos

|   |                         |              |           |                        |              |
|---|-------------------------|--------------|-----------|------------------------|--------------|
| LM Start  | <b>2.50</b>             | Rating **    | <b>M</b>  | Issue No.              | <b>73</b>    |
| LM End  | <b>2.50</b>             | Issue Type + | <b>Ma</b> | Location *             | <b>WS</b>    |
| Category  | Earthen Levee           |              |           | GPS Latitude/Longitude |              |
|   |                         |              |           | Start                  | End          |
| Item  | Slope Stability         |              |           | 39.563676°             | 39.563676°   |
|   |                         |              |           | -121.703775°           | -121.703775° |
| DWR ID  | DWR_MA0013_01_f_2019_73 |              |           |                        |              |
| Comment Code  |                         |              |           |                        |              |
| S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible. |                         |              |           |                        |              |
| Inspector Comment   |                         |              |           |                        |              |
|   |                         |              |           |                        |              |

Photo 1 of 1 : FA\_2019\_MA0013\_300\_73\_20191028\_00144.jpg



View of depressions in the waterside slope due to vehicle traffic. Fall 2019.

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

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|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |              |
|---|-----------------------------------|--------------|----|------------------------|--------------|
| LM Start  | <b>2.70</b>                       | Rating **    | M  | Issue No.              | <b>96</b>    |
| LM End  | <b>2.70</b>                       | Issue Type + | Ma | Location *             |              |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |              |
|   |                                   |              |    | Start                  | End          |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.561130°             | 39.561130°   |
|   |                                   |              |    | -121.705140°           | -121.705140° |
| DWR ID  | 16347                             |              |    |                        |              |
| Comment Code  |                                   |              |    |                        |              |
| Inspector Comment   |                                   |              |    |                        |              |
| DS_ID:16347<br>FS_ID:54942<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/06/2019 Record has been updated from No Action Needed to Non-Urgent, no permit identified. Crossing is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Crossing appears to be in good condition.07/14/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/02/2013 Same as last inspection.07/15/2013 Same as last inspection.04/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blocked by sediment.<br>FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)]<br>FS Date: 8/6/2019 9:39:00 AM |                                   |              |    |                        |              |

Photo 1 of 3 : UCIP\_FA\_2019\_54942\_66715.jpg



Overview of levee crown looking downstream at crossing.

|          |             |              |    |            |                  |
|----------|-------------|--------------|----|------------|------------------|
| LM Start | <b>2.70</b> | Rating **    | M  | Issue No.  | <b>96 (cont)</b> |
| LM End   | <b>2.70</b> | Issue Type + | Ma | Location * |                  |

Photo 2 of 3 : UCIP\_FA\_2019\_54942\_66714.jpg



Flap gate at WS.

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



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|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |                        |              |           |
|--|-----------------------------------|--------------|------------------------|--------------|-----------|
| LM Start   | <b>3.05</b>                       | Rating **    | M                      | Issue No.    | <b>97</b> |
| LM End   | <b>3.05</b>                       | Issue Type + | Ma                     | Location *   |           |
| Category   | Supplemental                      |              | GPS Latitude/Longitude |              |           |
|  |                                   |              | Start                  | End          |           |
| Item   | DRAFT DWR UCIP LMA Responsibility |              | 39.556310°             | 39.556310°   |           |
|  |                                   |              | -121.706470°           | -121.706470° |           |
| DWR ID   | 17372                             |              |                        |              |           |
| Comment Code   |                                   |              |                        |              |           |
| Inspector Comment  |                                   |              |                        |              |           |
| <p>DS_ID:17372<br/>                 FS_ID:54943<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/06/2019 Record remains Non-Urgent, no permit identified authorizing pipe. Pipe has been internally cleaned and cleared of any obstructions on the WS and LS. DMP internal inspection pending. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 WS flap gate is completely buried by sediment-needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard- AFreitag)04/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that discharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.07/14/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/02/2013 Pipe section was dug up and repaired. Crossing is now in good condition.07/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.04/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.<br/>                 FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS).<br/>                 [Additional Reference(s): DWR Levee Log, 1993 (HLM 3.07, 24-inch). USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 3.10, 36-inch)]<br/>                 FS Date: 8/6/2019 9:47:00 AM</p> |                                   |              |                        |              |           |

Photo 1 of 3 : UCIP\_FA\_2019\_54943\_66718.jpg



Overview of levee crown looking downstream at crossing.

|  |   |  |
|--|---|--|
| <p><b>* Location</b><br/>                 LS : Land Side N/A : Not Applicable<br/>                 WS : Water Side<br/>                 CR : Crown</p> | <p><b>** Rating</b><br/>                 A : Acceptable N : Not Inspected/Rated<br/>                 M : Minimally Acceptable C : Corrected<br/>                 U : Unacceptable A/W : Acceptable but Monitor &amp; Maintain</p> | <p><b>+ Issue Type</b><br/>                 Ma : Maintenance Deficiency<br/>                 Ob : Design &amp; System Obsolescence<br/>                 En : Enforcement</p> |
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| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |    |                        |                  |
|--|-----------------------------------|--------------|----|------------------------|------------------|
| LM Start   | <b>3.05</b>                       | Rating **    | M  | Issue No.              | <b>97 (cont)</b> |
| LM End   | <b>3.05</b>                       | Issue Type + | Ma | Location *             |                  |
| Category   | Supplemental                      |              |    | GPS Latitude/Longitude |                  |
|  |                                   |              |    | Start                  | End              |
| Item   | DRAFT DWR UCIP LMA Responsibility |              |    | 39.556310°             | 39.556310°       |
|  |                                   |              |    | -121.706470°           | -121.706470°     |
| DWR ID   | 17372                             |              |    |                        |                  |
| Comment Code   |                                   |              |    |                        |                  |
| Inspector Comment  |                                   |              |    |                        |                  |
| <p>DS_ID:17372<br/>                 FS_ID:54943<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/06/2019 Record remains Non-Urgent, no permit identified authorizing pipe. Pipe has been internally cleaned and cleared of any obstructions on the WS and LS. DMP internal inspection pending. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 WS flap gate is completely buried by sediment-needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard- AFreitag)04/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that discharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.07/14/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/02/2013 Pipe section was dug up and repaired. Crossing is now in good condition.07/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.04/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.<br/>                 FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS).<br/>                 [Additional Reference(s): DWR Levee Log, 1993 (HLM 3.07, 24-inch). USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 3.10, 36-inch)]<br/>                 FS Date: 8/6/2019 9:47:00 AM</p> |                                   |              |    |                        |                  |

Photo 2 of 3 : UCIP\_FA\_2019\_54943\_66716.jpg



WS levee slope.

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







**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |    |                        |                  |
|--|-----------------------------------|--------------|----|------------------------|------------------|
| LM Start   | <b>3.24</b>                       | Rating **    | M  | Issue No.              | <b>98 (cont)</b> |
| LM End   | <b>3.24</b>                       | Issue Type + | Ma | Location *             |                  |
| Category   | Supplemental                      |              |    | GPS Latitude/Longitude |                  |
|  |                                   |              |    | Start                  | End              |
| Item   | DRAFT DWR UCIP LMA Responsibility |              |    | 39.553490°             | 39.553490°       |
|  |                                   |              |    | -121.706680°           | -121.706680°     |
| DWR ID   | 16349                             |              |    |                        |                  |
| Comment Code   |                                   |              |    |                        |                  |
| Inspector Comment  |                                   |              |    |                        |                  |
| <p>DS_ID:16349<br/>                 FS_ID:54944<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/06/2019 Record remains Non-Urgent, no permit found authorizing pipe. Pipe has been lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)04/28/2016 Sediment build up on both gates blocking them from operating properly.07/14/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/02/2013 Same as last inspection.07/15/2013 Stem on LS screw gate has been replaced and is now full functional.04/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS &amp; LS due to sediment and grass blocking inlet and outlet.<br/>                 FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 3.29)]<br/>                 FS Date: 8/6/2019 10:02:00 AM</p> |                                   |              |    |                        |                  |

Photo 3 of 3 : UCIP\_FA\_2019\_54944\_66726.jpg



Recent sediment removal on WS.

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





**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |                        |              |            |
|--|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start   | <b>3.72</b>                       | Rating **    | M                      | Issue No.    | <b>100</b> |
| LM End   | <b>3.72</b>                       | Issue Type + | Ma                     | Location *   |            |
| Category   | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|  |                                   |              | Start                  | End          |            |
| Item   | DRAFT DWR UCIP LMA Responsibility |              | 39.546592°             | 39.546592°   |            |
|  |                                   |              | -121.707560°           | -121.707560° |            |
| DWR ID   | 16351                             |              |                        |              |            |
| Comment Code   |                                   |              |                        |              |            |
| Inspector Comment  |                                   |              |                        |              |            |
| <p>DS_ID:16351<br/>                 FS_ID:54946<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/26/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified for this crossing. Crossing is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Both sides of the crossing were underwater during time of inspection.07/14/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/02/2013 Same as last inspection.07/15/2013 Slopes have been cleared of vegetation and are in good condition.04/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.<br/>                 FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 3.80)]<br/>                 FS Date: 8/26/2019 12:22:00 PM</p> |                                   |              |                        |              |            |

Photo 1 of 3 : UCIP\_FA\_2019\_54946\_66736.jpg



Overview of levee crown at crossing looking downstream.

|          |             |              |    |            |                   |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | <b>3.72</b> | Rating **    | M  | Issue No.  | <b>100 (cont)</b> |
| LM End   | <b>3.72</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_54946\_66738.jpg



WS slope covered by dense vegetation.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |    |                        |                   |
|--|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start   | <b>3.72</b>                       | Rating **    | M  | Issue No.              | <b>100 (cont)</b> |
| LM End   | <b>3.72</b>                       | Issue Type + | Ma | Location *             |                   |
| Category   | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|  |                                   |              |    | Start                  | End               |
| Item   | DRAFT DWR UCIP LMA Responsibility |              |    | 39.546592 °            | 39.546592 °       |
|  |                                   |              |    | -121.707560 °          | -121.707560 °     |
| DWR ID   | 16351                             |              |    |                        |                   |
| Comment Code   |                                   |              |    |                        |                   |
| Inspector Comment  |                                   |              |    |                        |                   |
| <p>DS_ID:16351<br/>                 FS_ID:54946<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/26/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified for this crossing. Crossing is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Both sides of the crossing were underwater during time of inspection.07/14/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/02/2013 Same as last inspection.07/15/2013 Slopes have been cleared of vegetation and are in good condition.04/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.<br/>                 FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 3.80)]<br/>                 FS Date: 8/26/2019 12:22:00 PM</p> |                                   |              |    |                        |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_54946\_66735.jpg



WS flap gate

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































**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |               |            |
|---|-----------------------------------|--------------|------------------------|---------------|------------|
| LM Start  | <b>5.87</b>                       | Rating **    | M                      | Issue No.     | <b>111</b> |
| LM End  | <b>5.87</b>                       | Issue Type + | Ma                     | Location *    |            |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |               |            |
|   |                                   |              | Start                  | End           |            |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.516059 °            | 39.516059 °   |            |
|   |                                   |              | -121.710810 °          | -121.710810 ° |            |
| DWR ID  | 16360                             |              |                        |               |            |
| Comment Code  |                                   |              |                        |               |            |
| Inspector Comment   |                                   |              |                        |               |            |
| <p>DS_ID:16360<br/>                 FS_ID:54958<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/26/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Crossing appears to be in good condition.07/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.05/21/2014 Same as last inspection.12/02/2013 Same as last inspection.07/15/2013 Same as last inspection.04/18/2012 Burrow activity near crossing; burrow holes present on LS.<br/>                 FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 5.97)]<br/>                 FS Date: 8/26/2019 12:40:00 PM</p> |                                   |              |                        |               |            |

Photo 1 of 3 : UCIP\_FA\_2019\_54958\_66800.jpg



Overview of levee crown at crossing looking downstream.

|          |             |              |    |            |                   |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | <b>5.87</b> | Rating **    | M  | Issue No.  | <b>111 (cont)</b> |
| LM End   | <b>5.87</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_54958\_66801.jpg



View of WS slope and toe.

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





**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>6.23</b>                       | Rating **    | M  | Issue No.              | <b>112 (cont)</b> |
| LM End  | <b>6.23</b>                       | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.511337°             | 39.511337°        |
|   |                                   |              |    | -121.713620°           | -121.713620°      |
| DWR ID  | 16361                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16361<br/>                 FS_ID:54959<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/26/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screw gate is buried and non-operational. (DWR Sutter Yard- AFreitag)04/28/2016 LS screw gate is still completely buried. 07/13/2015 LS screw gate is completely buried.05/21/2014 Same as last inspection.07/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/02/2013 Same as last inspection.04/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.<br/>                 FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 6.34)]<br/>                 FS Date: 8/26/2019 12:41:00 PM</p> |                                   |              |    |                        |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_54959\_66804.jpg



View of WS flap gate.

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













**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |                        |              |            |
|--|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start   | <b>7.46</b>                       | Rating **    | M                      | Issue No.    | <b>116</b> |
| LM End   | <b>7.46</b>                       | Issue Type + | Ma                     | Location *   |            |
| Category   | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|  |                                   |              | Start                  | End          |            |
| Item   | DRAFT DWR UCIP LMA Responsibility |              | 39.496146°             | 39.496146°   |            |
|  |                                   |              | -121.725160°           | -121.725160° |            |
| DWR ID   | 16352                             |              |                        |              |            |
| Comment Code   |                                   |              |                        |              |            |
| Inspector Comment  |                                   |              |                        |              |            |
| <p>DS_ID:16352<br/>                 FS_ID:54969<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/26/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Crossing appears to be in good condition.07/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.05/21/2014 Same as last inspection.12/02/2013 Same as last inspection.07/15/2013 Slopes have been cleared of vegetation and are in good condition.04/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.<br/>                 FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 7.58)]<br/>                 FS Date: 8/26/2019 1:03:00 PM</p> |                                   |              |                        |              |            |

Photo 1 of 3 : UCIP\_FA\_2019\_54969\_66853.jpg



View of levee crown at crossing looking D/S.

|          |             |              |    |            |                   |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | <b>7.46</b> | Rating **    | M  | Issue No.  | <b>116 (cont)</b> |
| LM End   | <b>7.46</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_54969\_66851.jpg



WS view of slope and channel.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |              |            |
|---|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start  | <b>7.64</b>                       | Rating **    | M                      | Issue No.    | <b>117</b> |
| LM End  | <b>7.64</b>                       | Issue Type + | Ma                     | Location *   |            |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|   |                                   |              | Start                  | End          |            |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.493756°             | 39.493756°   |            |
|   |                                   |              | -121.726570°           | -121.726570° |            |
| DWR ID  | 16320                             |              |                        |              |            |
| Comment Code  |                                   |              |                        |              |            |
| Inspector Comment   |                                   |              |                        |              |            |
| <p>DS_ID:16320<br/>                 FS_ID:56090<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/26/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. The following maintenance issues should be addressed: clear vegetation from LS inlet and repair CMP riser lid (safety measure). (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Crossing appears to be in good condition.07/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.05/21/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Same as last inspection.<br/>                 FIELD_STRUCT_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet.<br/>                 [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 7.76)]<br/>                 FS Date: 8/26/2019 1:06:00 PM</p> |                                   |              |                        |              |            |

Photo 1 of 3 : UCIP\_FA\_2019\_56090\_66867.jpg



Overview of levee crown at crossing (past gate) looking D/S.

|          |             |              |    |            |                   |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | <b>7.64</b> | Rating **    | M  | Issue No.  | <b>117 (cont)</b> |
| LM End   | <b>7.64</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_56090\_66865.jpg



View of WS slope, corrugated metal riser with slide gate.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |                        |               |            |
|--|-----------------------------------|--------------|------------------------|---------------|------------|
| LM Start   | <b>8.00</b>                       | Rating **    | M                      | Issue No.     | <b>118</b> |
| LM End   | <b>8.00</b>                       | Issue Type + | Ma                     | Location *    |            |
| Category   | Supplemental                      |              | GPS Latitude/Longitude |               |            |
|  |                                   |              | Start                  | End           |            |
| Item   | DRAFT DWR UCIP LMA Responsibility |              | 39.489061 °            | 39.489061 °   |            |
|  |                                   |              | -121.729430 °          | -121.729430 ° |            |
| DWR ID   | 16321                             |              |                        |               |            |
| Comment Code   |                                   |              |                        |               |            |
| Inspector Comment  |                                   |              |                        |               |            |
| <p>DS_ID:16321<br/>                 FS_ID:54973<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/27/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Crossing appears to be in good condition.07/13/2015 Crossing appears to be in good condition.</p> <p>05/21/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Same as last inspection.04/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.<br/>                 FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 8.12)]<br/>                 FS Date: 8/27/2019 2:07:00 PM</p> |                                   |              |                        |               |            |

Photo 1 of 3 : UCIP\_FA\_2019\_54973\_66872.jpg



Overview of levee crown at crossing looking D/S.

|          |             |              |    |            |                   |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | <b>8.00</b> | Rating **    | M  | Issue No.  | <b>118 (cont)</b> |
| LM End   | <b>8.00</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_54973\_66873.jpg



View of WS slope and toe.

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









**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                         |              |    |                        |              |
|---|-------------------------|--------------|----|------------------------|--------------|
| LM Start  | <b>8.60</b>             | Rating **    | C  | Issue No.              | <b>76</b>    |
| LM End  | <b>8.60</b>             | Issue Type + | Ma | Location *             | WS           |
| Category  | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|   |                         |              |    | Start                  | End          |
| Item  | Encroachments           |              |    | 39.481123°             | 39.481123°   |
|   |                         |              |    | -121.734162°           | -121.734162° |
| DWR ID  | DWR_MA0013_01_s_2019_76 |              |    |                        |              |
| Comment Code  |                         |              |    |                        |              |
| TR : Tree or limb   |                         |              |    |                        |              |
| Inspector Comment   |                         |              |    |                        |              |
| The large fallen tree should be removed from the waterside slope. |                         |              |    |                        |              |

No Photos

|  |                         |              |    |                        |              |
|--|-------------------------|--------------|----|------------------------|--------------|
| LM Start   | <b>8.81</b>             | Rating **    | M  | Issue No.              | <b>49</b>    |
| LM End   | <b>8.81</b>             | Issue Type + | Ma | Location *             | LS           |
| Category   | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|  |                         |              |    | Start                  | End          |
| Item   | Erosion / Bank Caving   |              |    | 39.478648°             | 39.478648°   |
|  |                         |              |    | -121.736477°           | -121.736477° |
| DWR ID   | DWR_MA0013_01_f_2016_49 |              |    |                        |              |
| Comment Code   |                         |              |    |                        |              |
| E2 : Schedule repair of erosion site prior to the next inspection. |                         |              |    |                        |              |
| Inspector Comment  |                         |              |    |                        |              |

Photo 1 of 1 : FA\_2019\_MA0013\_300\_49\_20190822\_00007.jpg



View of the erosion site along the landside toe.

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









**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>8.95</b>                       | Rating **    | M  | Issue No.              | <b>127 (cont)</b> |
| LM End  | <b>8.95</b>                       | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.476839 °            | 39.476839 °       |
|   |                                   |              |    | -121.737540 °          | -121.737540 °     |
| DWR ID  | 16317                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16317<br/>                 FS_ID:54982<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/27/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/28/2016 Crossing appears to be in good condition.07/13/2015 LS inlet has minor vegetation still. WS appears in good condition.05/21/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Slopes have been cleared of vegetation and are in good condition.04/18/2012 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 Inspections as Corp's Insect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet.<br/>                 FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 9.09)]<br/>                 FS Date: 8/27/2019 2:13:00 PM</p> |                                   |              |    |                        |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_54982\_66911.jpg



View of WS slope and toe.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                        |              |    |                        |               |
|---|------------------------|--------------|----|------------------------|---------------|
| LM Start  | <b>9.70</b>            | Rating **    | M  | Issue No.              | <b>5</b>      |
| LM End  | <b>9.72</b>            | 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 |              |    |                        |               |
| Comment Code  |                        |              |    |                        |               |
| T1 : Trim trees to at least five feet above ground level. |                        |              |    |                        |               |
| Inspector Comment   |                        |              |    |                        |               |
|   |                        |              |    |                        |               |

Photo 1 of 1 : FA\_2019\_MA0013\_300\_5\_20190822\_00002.jpg



View of the overgrown trees along the landside slope and toe.

|   |                         |              |    |                        |               |
|---|-------------------------|--------------|----|------------------------|---------------|
| LM Start  | <b>9.75</b>             | Rating **    | M  | Issue No.              | <b>64</b>     |
| LM End  | <b>9.75</b>             | Issue Type + | Ma | Location *             | LS            |
| Category  | Earthen Levee           |              |    | GPS Latitude/Longitude |               |
|   |                         |              |    | Start                  | End           |
| Item  | Trim / Thin Trees       |              |    | 39.466478 °            | 39.466478 °   |
|   |                         |              |    | -121.744338 °          | -121.744338 ° |
| DWR ID  | DWR_MA0013_01_f_2016_64 |              |    |                        |               |
| Comment Code  |                         |              |    |                        |               |
| T1 : Trim trees to at least five feet above ground level. |                         |              |    |                        |               |
| Inspector Comment   |                         |              |    |                        |               |
|   |                         |              |    |                        |               |

No Photos

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>11.03</b>                      | Rating **    | M  | Issue No.              | <b>129 (cont)</b> |
| LM End  | <b>11.03</b>                      | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.449886 °            | 39.449886 °       |
|   |                                   |              |    | -121.755050 °          | -121.755050 °     |
| DWR ID  | 16332                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16332<br/>                     FS_ID:54990<br/>                     EP_NO: N/A<br/>                     Repair Type: Non-Urgent<br/>                     Crossing Status: Found<br/>                     UCIP Comments: 08/27/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing the dual purpose of this crossing. Crossing is used as an irrigation turnout. Flow from Cherokee canal is diverted about 900 feet upstream by weir and feed into an irrigation canal that runs parallel along WS levee toe for about 2.5 miles. The irrigation turnout is used to divert water from WS irrigation canal to LS. Need to update crossing type from Drainage to Other. This crossing is not maintained or operated by LMA-Sutter Yard. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- A.Freitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A.Freitag)04/28/2016 Crossing appears to be in good condition.07/13/2015 Crossing appears in good condition. No noticeable issues to report.05/21/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Same as last inspection.<br/>                     FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 11.21)]<br/>                     FS Date: 8/27/2019 2:16:00 PM</p> |                                   |              |    |                        |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_54990\_66925.jpg



Corrugated metal riser with owner information.

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

























**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |    |                        |                   |
|----------|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start | <b>12.74</b>                      | Rating **    | M  | Issue No.              | <b>133 (cont)</b> |
| LM End   | <b>12.74</b>                      | Issue Type + | Ma | Location *             |                   |
| Category | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|          |                                   |              |    | Start                  | End               |
| Item     | DRAFT DWR UCIP LMA Responsibility |              |    | 39.428070 °            | 39.428070 °       |
|          |                                   |              |    | -121.770080 °          | -121.770080 °     |
| DWR ID   | 16336                             |              |    |                        |                   |

Comment Code

Inspector Comment

DS\_ID:16336  
 FS\_ID:54994  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/27/2019 Record remains Non-Urgent, no permit has been identified authorizing the dual purpose of this crossing and slide gate is still missing from the WS CMP riser. Crossing is used as an irrigation turnout. Flow from Cherokee Canal is diverted upstream by weir and feed into an irrigation canal that runs parallel along WS levee toe for about 2.5 miles. The irrigation turnout is used to divert water from WS irrigation canal to LS. Need to update crossing type from Drainage to Other. This crossing is not maintained or operated by LMA-Sutter Yard. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)04/28/2016 Slide gate was removed from inside the WS standpipe.07/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.05/21/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Same as last inspection.04/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)]  
 FS Date: 8/27/2019 2:18:00 PM

Photo 3 of 3 : UCIP\_FA\_2019\_54994\_66951.jpg



Slide gate located on WS slope. Owner information marked on gate.

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













**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |               |            |
|---|-----------------------------------|--------------|------------------------|---------------|------------|
| LM Start  | <b>13.77</b>                      | Rating **    | M                      | Issue No.     | <b>136</b> |
| LM End  | <b>13.77</b>                      | Issue Type + | Ma                     | Location *    |            |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |               |            |
|   |                                   |              | Start                  | End           |            |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.416756 °            | 39.416756 °   |            |
|   |                                   |              | -121.782060 °          | -121.782060 ° |            |
| DWR ID  | 16339                             |              |                        |               |            |
| Comment Code  |                                   |              |                        |               |            |
| Inspector Comment   |                                   |              |                        |               |            |
| <p>DS_ID:16339<br/>                 FS_ID:54998<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/27/2019 Record remains Non-Urgent, crossing has been abandoned. Need to update crossing type from Drainage to Irrigation. Crossing was used as a irrigation line and not drainage. This crossing is not maintained or operated by LMA-Sutter Yard. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Abandoned- still only the structure on the WS shoulder found. (DWR Sutter Yard- AFreitag)11/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)05/03/2016 ABANDONED CROSSING07/13/2015 Abandoned crossing. Slide gate is buried on the WS.05/22/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Same as last inspection.04/18/2012 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 &amp; 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.<br/>                 FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel irrigation pipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 13.97)]<br/>                 FS Date: 8/27/2019 2:20:00 PM</p> |                                   |              |                        |               |            |

Photo 1 of 3 : UCIP\_FA\_2019\_54998\_66972.jpg



Buried slide gate on the WS slope.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |    |                        |                   |
|--|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start   | <b>13.77</b>                      | Rating **    | M  | Issue No.              | <b>136 (cont)</b> |
| LM End   | <b>13.77</b>                      | Issue Type + | Ma | Location *             |                   |
| Category   | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|  |                                   |              |    | Start                  | End               |
| Item   | DRAFT DWR UCIP LMA Responsibility |              |    | 39.416756 °            | 39.416756 °       |
|  |                                   |              |    | -121.782060 °          | -121.782060 °     |
| DWR ID   | 16339                             |              |    |                        |                   |
| Comment Code   |                                   |              |    |                        |                   |
| Inspector Comment  |                                   |              |    |                        |                   |
| DS_ID:16339<br>FS_ID:54998<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/27/2019 Record remains Non-Urgent, crossing has been abandoned. Need to update crossing type from Drainage to Irrigation. Crossing was used as a irrigation line and not drainage. This crossing is not maintained or operated by LMA-Sutter Yard. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Abandoned- still only the structure on the WS shoulder found. (DWR Sutter Yard- AFreitag)11/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)05/03/2016 ABANDONED CROSSING07/13/2015 Abandoned crossing. Slide gate is buried on the WS.05/22/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Same as last inspection.04/18/2012 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.<br>FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel irrigation pipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.97)]<br>FS Date: 8/27/2019 2:20:00 PM |                                   |              |    |                        |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_54998\_66973.jpg



View of LS slope and toe. Unable to find welded plate on LS.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |               |                   |
|---|-----------------------------------|--------------|------------------------|---------------|-------------------|
| LM Start  | <b>13.77</b>                      | Rating **    | M                      | Issue No.     | <b>136 (cont)</b> |
| LM End  | <b>13.77</b>                      | Issue Type + | Ma                     | Location *    |                   |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |               |                   |
|   |                                   |              | Start                  | End           |                   |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.416756 °            | 39.416756 °   |                   |
|   |                                   |              | -121.782060 °          | -121.782060 ° |                   |
| DWR ID  | 16339                             |              |                        |               |                   |
| Comment Code  |                                   |              |                        |               |                   |
| Inspector Comment   |                                   |              |                        |               |                   |
| <p>DS_ID:16339<br/>                 FS_ID:54998<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/27/2019 Record remains Non-Urgent, crossing has been abandoned. Need to update crossing type from Drainage to Irrigation. Crossing was used as a irrigation line and not drainage. This crossing is not maintained or operated by LMA-Sutter Yard. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Abandoned- still only the structure on the WS shoulder found. (DWR Sutter Yard- AFreitag)11/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)05/03/2016 ABANDONED CROSSING07/13/2015 Abandoned crossing. Slide gate is buried on the WS.05/22/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Same as last inspection.04/18/2012 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 &amp; 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.<br/>                 FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel irrigation pipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 13.97)]<br/>                 FS Date: 8/27/2019 2:20:00 PM</p> |                                   |              |                        |               |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_54998\_80558.jpg



WS view: pipe section capped off on WS.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |                        |              |            |
|----------|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start | <b>14.58</b>                      | Rating **    | U                      | Issue No.    | <b>137</b> |
| LM End   | <b>14.58</b>                      | Issue Type + | Ma                     | Location *   |            |
| Category | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|          |                                   |              | Start                  | End          |            |
| Item     | DRAFT DWR UCIP LMA Responsibility |              | 39.409481°             | 39.409481°   |            |
|          |                                   |              | -121.794010°           | -121.794010° |            |
| DWR ID   | 16368                             |              |                        |              |            |

**Comment Code**

**Inspector Comment**

DS\_ID:16368  
 FS\_ID:54999  
 EP\_NO: N/A  
 Repair Type: Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/27/2019 Record remains Urgent due to pipe integrity and levee integrity issues. Previously noted holes on the pipe collar located at WS have been sealed using splash zone epoxy. Two holes (possible sink holes) were observed behind WS concrete headwall. Recommend internal inspection of pipe through levee to determine if sink holes are attributed to holes in pipe. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)08/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern; possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degradation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).06/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flap gate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard- AFreitag)05/03/2016 Top of the pipe on the WS has holes in it between the flap gate flange and headwall. Crossing is showing signs of rust and deterioration but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - aFreitag)07/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard - aFreitag)05/22/2014 Same as last inspection. (DWR Sutter Yard - aFreitag)12/03/2013 Same as last inspection. (DWR Sutter Yard - aFreitag)07/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flap gate is still lodged open. (DWR Sutter Yard - aFreitag)04/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)  
 FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]  
 FS Date: 8/27/2019 2:20:00 PM

Photo 1 of 3 : UCIP\_FA\_2019\_54999\_66976.jpg



Headwall and flapgate located on water side of levee

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |    |                        |                   |
|----------|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start | <b>14.58</b>                      | Rating **    | U  | Issue No.              | <b>137 (cont)</b> |
| LM End   | <b>14.58</b>                      | Issue Type + | Ma | Location *             |                   |
| Category | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|          |                                   |              |    | Start                  | End               |
| Item     | DRAFT DWR UCIP LMA Responsibility |              |    | 39.409481°             | 39.409481°        |
|          |                                   |              |    | -121.794010°           | -121.794010°      |
| DWR ID   | 16368                             |              |    |                        |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_54999\_66974.jpg



Headwall and flapgate located on water side of levee

|                   |  |  |  |  |  |
|-------------------|--|--|--|--|--|
| Comment Code      |  |  |  |  |  |
| Inspector Comment |  |  |  |  |  |

DS\_ID:16368  
 FS\_ID:54999  
 EP\_NO: N/A  
 Repair Type: Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/27/2019 Record remains Urgent due to pipe integrity and levee integrity issues. Previously noted holes on the pipe collar located at WS have been sealed using splash zone epoxy. Two holes (possible sink holes) were observed behind WS concrete headwall. Recommend internal inspection of pipe through levee to determine if sink holes are attributed to holes in pipe. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)08/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern; possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degradation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).06/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flap gate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard- AFreitag)05/03/2016 Top of the pipe on the WS has holes in it between the flap gate flange and headwall. Crossing is showing signs of rust and deterioration but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - aFreitag)07/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard - aFreitag)05/22/2014 Same as last inspection. (DWR Sutter Yard - aFreitag)12/03/2013 Same as last inspection. (DWR Sutter Yard - aFreitag)07/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flap gate is still lodged open. (DWR Sutter Yard - aFreitag)04/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)  
 FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]  
 FS Date: 8/27/2019 2:20:00 PM

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |    |                        |                   |
|----------|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start | <b>14.58</b>                      | Rating **    | U  | Issue No.              | <b>137 (cont)</b> |
| LM End   | <b>14.58</b>                      | Issue Type + | Ma | Location *             |                   |
| Category | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|          |                                   |              |    | Start                  | End               |
| Item     | DRAFT DWR UCIP LMA Responsibility |              |    | 39.409481 °            | 39.409481 °       |
|          |                                   |              |    | -121.794010 °          | -121.794010 °     |
| DWR ID   | 16368                             |              |    |                        |                   |

**Comment Code**

Inspector Comment

DS\_ID:16368  
 FS\_ID:54999  
 EP\_NO: N/A  
 Repair Type: Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/27/2019 Record remains Urgent due to pipe integrity and levee integrity issues. Previously noted holes on the pipe collar located at WS have been sealed using splash zone epoxy. Two holes (possible sink holes) were observed behind WS concrete headwall. Recommend internal inspection of pipe through levee to determine if sink holes are attributed to holes in pipe. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)08/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern; possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degradation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).06/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flap gate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard- AFreitag)05/03/2016 Top of the pipe on the WS has holes in it between the flap gate flange and headwall. Crossing is showing signs of rust and deterioration but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - aFreitag)07/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard - aFreitag)05/22/2014 Same as last inspection. (DWR Sutter Yard - aFreitag)12/03/2013 Same as last inspection. (DWR Sutter Yard - aFreitag)07/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flap gate is still lodged open. (DWR Sutter Yard - aFreitag)04/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)  
 FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]  
 FS Date: 8/27/2019 2:20:00 PM

Photo 3 of 3 : UCIP\_FA\_2019\_54999\_66975.jpg



Head wall and screw gate located on land side of levee

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |    |                        |              |
|----------|-----------------------------------|--------------|----|------------------------|--------------|
| LM Start | <b>14.91</b>                      | Rating **    | M  | Issue No.              | <b>138</b>   |
| LM End   | <b>14.91</b>                      | Issue Type + | Ma | Location *             |              |
| Category | Supplemental                      |              |    | GPS Latitude/Longitude |              |
|          |                                   |              |    | Start                  | End          |
| Item     | DRAFT DWR UCIP LMA Responsibility |              |    | 39.406570°             | 39.406570°   |
|          |                                   |              |    | -121.798770°           | -121.798770° |
| DWR ID   | 16367                             |              |    |                        |              |

Comment Code

Inspector Comment

DS\_ID:16367  
 FS\_ID:55000  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/27/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)05/03/2016 Crossing appears to be in good condition.07/13/2015 Crossing appears in good condition. No noticeable issues to report.05/22/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Slopes have been cleared of vegetation and are in good condition.04/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes.  
 FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]  
 FS Date: 8/27/2019 2:21:00 PM

|          |              |              |    |            |                   |
|----------|--------------|--------------|----|------------|-------------------|
| LM Start | <b>14.91</b> | Rating **    | M  | Issue No.  | <b>138 (cont)</b> |
| LM End   | <b>14.91</b> | Issue Type + | Ma | Location * |                   |

Photo 1 of 3 : UCIP\_FA\_2019\_55000\_66981.jpg



WS headwall and flapgate

Photo 2 of 3 : UCIP\_FA\_2019\_55000\_66980.jpg



Slide gate located on LS toe. Dense vegetation present on LS slope.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |    |                        |                   |
|--|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start   | <b>14.91</b>                      | Rating **    | M  | Issue No.              | <b>138 (cont)</b> |
| LM End   | <b>14.91</b>                      | Issue Type + | Ma | Location *             |                   |
| Category   | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|  |                                   |              |    | Start                  | End               |
| Item   | DRAFT DWR UCIP LMA Responsibility |              |    | 39.406570 °            | 39.406570 °       |
|  |                                   |              |    | -121.798770 °          | -121.798770 °     |
| DWR ID   | 16367                             |              |    |                        |                   |
| Comment Code   |                                   |              |    |                        |                   |
| Inspector Comment  |                                   |              |    |                        |                   |
| <p>DS_ID:16367<br/>                 FS_ID:55000<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/27/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)05/03/2016 Crossing appears to be in good condition.07/13/2015 Crossing appears in good condition. No noticeable issues to report.05/22/2014 Same as last inspection.12/03/2013 Same as last inspection.07/15/2013 Slopes have been cleared of vegetation and are in good condition.04/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS &amp; LS slopes.<br/>                 FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 15.12)]<br/>                 FS Date: 8/27/2019 2:21:00 PM</p> |                                   |              |    |                        |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_55000\_66982.jpg



WS slope cleared of vegetation

|                                |                         |              |    |                        |               |
|--------------------------------|-------------------------|--------------|----|------------------------|---------------|
| LM Start                       | <b>15.58</b>            | Rating **    | M  | Issue No.              | <b>57</b>     |
| LM End                         | <b>15.58</b>            | Issue Type + | Ma | Location *             | LS            |
| Category                       | Earthen Levee           |              |    | GPS Latitude/Longitude |               |
|                                |                         |              |    | Start                  | End           |
| Item                           | Slope Stability         |              |    | 39.400380 °            | 39.400380 °   |
|                                |                         |              |    | -121.808432 °          | -121.808432 ° |
| DWR ID                         | DWR_MA0013_01_f_2016_57 |              |    |                        |               |
| Comment Code                   |                         |              |    |                        |               |
| S1 : Repair slope instability. |                         |              |    |                        |               |
| Inspector Comment              |                         |              |    |                        |               |

Photo 1 of 1 : FA\_2019\_MA0013\_300\_57\_20190822\_00008.jpg



View of slope instability along the landside slope.

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





**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                         |              |    |                        |              |
|--|-------------------------|--------------|----|------------------------|--------------|
| LM Start                                     | <b>16.33</b>            | Rating **    | C  | Issue No.              | <b>77</b>    |
| LM End                                       | <b>16.33</b>            | Issue Type + | Ma | Location *             | LS           |
| Category                                     | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|  |                         |              |    | Start                  | End          |
| Item   | Encroachments           |              |    | 39.393412°             | 39.393412°   |
|  |                         |              |    | -121.819220°           | -121.819220° |
| DWR ID                                       | DWR_MA0013_01_s_2019_77 |              |    |                        |              |
| Comment Code                                 |                         |              |    |                        |              |
| PR : Prunings                                |                         |              |    |                        |              |
| Inspector Comment                            |                         |              |    |                        |              |
| Remove the prunings from the landside slope. |                         |              |    |                        |              |

No Photos

|  |                         |              |    |                        |              |
|--|-------------------------|--------------|----|------------------------|--------------|
| LM Start                                     | <b>16.44</b>            | Rating **    | C  | Issue No.              | <b>78</b>    |
| LM End                                       | <b>16.44</b>            | Issue Type + | Ma | Location *             | LS           |
| Category                                     | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|  |                         |              |    | Start                  | End          |
| Item   | Encroachments           |              |    | 39.392379°             | 39.392379°   |
|  |                         |              |    | -121.820820°           | -121.820820° |
| DWR ID                                       | DWR_MA0013_01_s_2019_78 |              |    |                        |              |
| Comment Code                                 |                         |              |    |                        |              |
| PR : Prunings                                |                         |              |    |                        |              |
| Inspector Comment                            |                         |              |    |                        |              |
| Remove the prunings from the landside slope. |                         |              |    |                        |              |

No Photos

|  |                         |              |    |                        |              |
|--|-------------------------|--------------|----|------------------------|--------------|
| LM Start                                     | <b>16.52</b>            | Rating **    | M  | Issue No.              | <b>56</b>    |
| LM End                                       | <b>16.52</b>            | Issue Type + | Ma | Location *             | LS           |
| Category                                     | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|  |                         |              |    | Start                  | End          |
| Item   | Encroachments           |              |    | 39.391675°             | 39.391675°   |
|  |                         |              |    | -121.821932°           | -121.821932° |
| DWR ID                                       | DWR_MA0013_01_f_2016_56 |              |    |                        |              |
| Comment Code                                 |                         |              |    |                        |              |
| PR : Prunings                                |                         |              |    |                        |              |
| Inspector Comment                            |                         |              |    |                        |              |
| Remove the prunings from the landside slope. |                         |              |    |                        |              |

No Photos

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                         |              |    |                        |               |
|--|-------------------------|--------------|----|------------------------|---------------|
| LM Start                                     | <b>16.62</b>            | Rating **    | C  | Issue No.              | <b>79</b>     |
| LM End                                       | <b>16.62</b>            | Issue Type + | Ma | Location *             | LS            |
| Category                                     | Earthen Levee           |              |    | GPS Latitude/Longitude |               |
|  |                         |              |    | Start                  | End           |
| Item   | Encroachments           |              |    | 39.390709 °            | 39.390709 °   |
|  |                         |              |    | -121.823432 °          | -121.823432 ° |
| DWR ID                                       | DWR_MA0013_01_s_2019_79 |              |    |                        |               |
| Comment Code                                 |                         |              |    |                        |               |
| PR : Prunings                                |                         |              |    |                        |               |
| Inspector Comment                            |                         |              |    |                        |               |
| Remove the prunings from the landside slope. |                         |              |    |                        |               |

No Photos

|  |                         |              |    |                        |               |
|--|-------------------------|--------------|----|------------------------|---------------|
| LM Start                                   | <b>16.76</b>            | Rating **    | C  | Issue No.              | <b>80</b>     |
| LM End                                     | <b>16.76</b>            | Issue Type + | Ma | Location *             | LS            |
| Category                                   | Earthen Levee           |              |    | GPS Latitude/Longitude |               |
|  |                         |              |    | Start                  | End           |
| Item                                       | Encroachments           |              |    | 39.389442 °            | 39.389442 °   |
|  |                         |              |    | -121.825426 °          | -121.825426 ° |
| DWR ID                                     | DWR_MA0013_01_s_2019_80 |              |    |                        |               |
| Comment Code                               |                         |              |    |                        |               |
| PR : Prunings                              |                         |              |    |                        |               |
| Inspector Comment                          |                         |              |    |                        |               |
| Remove the prunings from the landside toe. |                         |              |    |                        |               |

No Photos

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |                        |              |            |
|--|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start   | <b>17.23</b>                      | Rating **    | M                      | Issue No.    | <b>145</b> |
| LM End   | <b>17.23</b>                      | Issue Type + | Ma                     | Location *   |            |
| Category   | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|  |                                   |              | Start                  | End          |            |
| Item   | DRAFT DWR UCIP LMA Responsibility |              | 39.385172°             | 39.385172°   |            |
|  |                                   |              | -121.832060°           | -121.832060° |            |
| DWR ID   | 16369                             |              |                        |              |            |
| Comment Code   |                                   |              |                        |              |            |
| Inspector Comment  |                                   |              |                        |              |            |
| DS_ID:16369<br>FS_ID:55006<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/27/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pipe has been lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Flap gate bolted shut. Hinges seem very stiff to operate as gate will not fully close and has about a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)05/03/2016 Crossing appears to be in good condition.07/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.05/22/2014 Same as last inspection.12/03/2013 Sediment was dug out from WS flap gate allowing it to open.07/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flap gate is blocked from opening by sediment buildup.04/18/2012 Limited inspection on WS and LS slope due to dense vegetation and steep slopes. Need photos of cleared WS & LS slopes.<br>FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS).<br>[Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]<br>FS Date: 8/27/2019 2:25:00 PM |                                   |              |                        |              |            |

Photo 1 of 3 : UCIP\_FA\_2019\_55006\_67017.jpg



View of WS slope and toe.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |       |            |                          |             |
|----------------------------|-------|------------|--------------------------|-------------|
| Waterway                   | Bank  | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 01 Cherokee Canal | Right | 18.19      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |    |                        |                   |
|--|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start   | <b>17.23</b>                      | Rating **    | M  | Issue No.              | <b>145 (cont)</b> |
| LM End   | <b>17.23</b>                      | Issue Type + | Ma | Location *             |                   |
| Category   | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|  |                                   |              |    | Start                  | End               |
| Item   | DRAFT DWR UCIP LMA Responsibility |              |    | 39.385172°             | 39.385172°        |
|  |                                   |              |    | -121.832060°           | -121.832060°      |
| DWR ID   | 16369                             |              |    |                        |                   |
| Comment Code   |                                   |              |    |                        |                   |
| Inspector Comment  |                                   |              |    |                        |                   |
| DS_ID:16369<br>FS_ID:55006<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/27/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pipe has been lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/15/2017 Flap gate bolted shut. Hinges seem very stiff to operate as gate will not fully close and has about a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- A.Freitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A.Freitag)05/03/2016 Crossing appears to be in good condition.07/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.05/22/2014 Same as last inspection.12/03/2013 Sediment was dug out from WS flap gate allowing it to open.07/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flap gate is blocked from opening by sediment buildup.04/18/2012 Limited inspection on WS and LS slope due to dense vegetation and steep slopes. Need photos of cleared WS & LS slopes.<br>FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS).<br>[Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]<br>FS Date: 8/27/2019 2:25:00 PM |                                   |              |    |                        |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_55006\_67019.jpg



View of WS headwall and flap gate.

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





**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |      |            |                          |             |
|----------------------------|------|------------|--------------------------|-------------|
| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |    |                        |                   |
|----------|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start | <b>0.05</b>                       | Rating **    | M  | Issue No.              | <b>912 (cont)</b> |
| LM End   | <b>0.05</b>                       | Issue Type + | Ma | Location *             |                   |
| Category | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|          |                                   |              |    | Start                  | End               |
| Item     | DRAFT DWR UCIP LMA Responsibility |              |    | 39.573816°             | 39.573816°        |
|          |                                   |              |    | -121.701290°           | -121.701290°      |
| DWR ID   | 16397                             |              |    |                        |                   |

Comment Code

Inspector Comment

DS\_ID:16397  
 FS\_ID:55415  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/28/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pipe has been lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)09/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)04/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the way through to the WS. (DWR Sutter Yard - afreitag)07/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)05/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/09/2013 4in. Pipe was removed and flap gate is closed and ready for high water. (DWR Sutter Yard - afreitag)07/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard - afreitag)04/19/2012 4-6 inch pipe is not part of original crossing--remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)  
 FIELD\_STRUCT\_DESC: 24-inch CIPP-lined corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end.  
 [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04).  
 FS Date: 8/28/2019 12:55:00 PM

Photo 2 of 3 : UCIP\_FA\_2019\_55415\_45642.jpg



Headwall and flap gate on WS. Soil and pipes stockpiled next to headwall.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>0.05</b>                       | Rating **    | M  | Issue No.              | <b>912 (cont)</b> |
| LM End  | <b>0.05</b>                       | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.573816°             | 39.573816°        |
|   |                                   |              |    | -121.701290°           | -121.701290°      |
| DWR ID  | 16397                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16397<br/>                 FS_ID:55415<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/28/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pipe has been lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)09/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)04/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the way through to the WS. (DWR Sutter Yard - afreitag)07/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)05/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/09/2013 4in. Pipe was removed and flap gate is closed and ready for high water. (DWR Sutter Yard - afreitag)07/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard - afreitag)04/19/2012 4-6 inch pipe is not part of original crossing--remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)<br/>                 FIELD_STRUCT_DESC: 24-inch CIPP-lined corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end.<br/>                 [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 0.04).<br/>                 FS Date: 8/28/2019 12:55:00 PM</p> |                                   |              |    |                        |                   |



LS headwall blocked by overgrown branches.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                         |              |    |                        |              |
|---|-------------------------|--------------|----|------------------------|--------------|
| LM Start  | <b>0.06</b>             | Rating **    | C  | Issue No.              | <b>50</b>    |
| LM End  | <b>0.06</b>             | Issue Type + | Ma | Location *             | LS           |
| Category  | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|   |                         |              |    | Start                  | End          |
| Item  | Trim / Thin Trees       |              |    | 39.573692°             | 39.573692°   |
|   |                         |              |    | -121.701286°           | -121.701286° |
| DWR ID  | DWR_MA0013_02_f_2016_50 |              |    |                        |              |
| Comment Code  |                         |              |    |                        |              |
| T1 : Trim trees to at least five feet above ground level. |                         |              |    |                        |              |
| Inspector Comment   |                         |              |    |                        |              |
|   |                         |              |    |                        |              |

No Photos

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |               |            |
|---|-----------------------------------|--------------|------------------------|---------------|------------|
| LM Start  | <b>0.58</b>                       | Rating **    | M                      | Issue No.     | <b>913</b> |
| LM End  | <b>0.58</b>                       | Issue Type + | Ma                     | Location *    |            |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |               |            |
|   |                                   |              | Start                  | End           |            |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.566479 °            | 39.566479 °   |            |
|   |                                   |              | -121.702430 °          | -121.702430 ° |            |
| DWR ID  | 16398                             |              |                        |               |            |
| Comment Code  |                                   |              |                        |               |            |
| Inspector Comment   |                                   |              |                        |               |            |
| <p>DS_ID:16398<br/>                     FS_ID:55970<br/>                     EP_NO: N/A<br/>                     Repair Type: Non-Urgent<br/>                     Crossing Status: Found<br/>                     UCIP Comments: 08/28/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe and modifications. Structure type has been changed from drainage to irrigation. Mr. Sohnrey property owner mentioned that this pipe is being used as irrigation line. DMP phase 1 internal inspection did not show any major defects through the section inspected (about 30 feet). (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Between the screw gate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)04/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.07/01/2015 LS pipe end is still about 50% full of sediment.05/29/2014 Same as last inspection.12/09/2013 Same as last inspection.07/10/2013 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 broken.04/19/2012 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 inspection.<br/>                     FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete stanpipe in the channel (located about 80 feet from levee toe) with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 0.57)]<br/>                     FS Date: 8/28/2019 1:25:00 PM</p> |                                   |              |                        |               |            |

Photo 1 of 3 : UCIP\_FA\_2019\_55970\_67047.jpg



Overview looking south

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











**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |              |            |
|---|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start  | <b>2.53</b>                       | Rating **    | M                      | Issue No.    | <b>916</b> |
| LM End  | <b>2.53</b>                       | Issue Type + | Ma                     | Location *   |            |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|   |                                   |              | Start                  | End          |            |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.539195°             | 39.539195°   |            |
|   |                                   |              | -121.706070°           | -121.706070° |            |
| DWR ID  | 16400                             |              |                        |              |            |
| Comment Code  |                                   |              |                        |              |            |
| Inspector Comment   |                                   |              |                        |              |            |
| <p>DS_ID:16400<br/>                 FS_ID:55418<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/28/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)6/5/2017 LS inlet was underwater. WS flap gate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard- AFreitag)4/27/2016 WS flap gate still blocked from opening by sediment buildup.7/01/2015 New screw gate installed on the LS. WS flap gate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.<br/>                 FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 2.54)]<br/>                 FS Date: 8/28/2019 1:09:00 PM</p> |                                   |              |                        |              |            |

Photo 1 of 3 : UCIP\_FA\_2019\_55418\_67063.jpg



Overview of levee crown looking south

|          |             |              |    |            |                   |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | <b>2.53</b> | Rating **    | M  | Issue No.  | <b>916 (cont)</b> |
| LM End   | <b>2.53</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_55418\_67068.jpg



View of WS slope.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>2.53</b>                       | Rating **    | M  | Issue No.              | <b>916 (cont)</b> |
| LM End  | <b>2.53</b>                       | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.539195°             | 39.539195°        |
|   |                                   |              |    | -121.706070°           | -121.706070°      |
| DWR ID  | 16400                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16400<br/>                 FS_ID:55418<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/28/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)6/5/2017 LS inlet was underwater. WS flap gate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard- AFreitag)4/27/2016 WS flap gate still blocked from opening by sediment buildup.7/01/2015 New screw gate installed on the LS. WS flap gate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.<br/>                 FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 2.54)]<br/>                 FS Date: 8/28/2019 1:09:00 PM</p> |                                   |              |    |                        |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_55418\_67064.jpg



Headwall and flap gates (2) located on WS

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





























**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>3.65</b>                       | Rating **    | M  | Issue No.              | <b>922 (cont)</b> |
| LM End  | <b>3.65</b>                       | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.523556°             | 39.523556°        |
|   |                                   |              |    | -121.705340°           | -121.705340°      |
| DWR ID  | 16848                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16848<br/>                 FS_ID:55096<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/28/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pending internal inspection under DMP Phase 1 both inlet and outlet underwater. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.07/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.05/29/2014 Same as last inspection.12/09/2013 Same as last inspection.07/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.04/19/2012 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 inspection.<br/>                 FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 3.67)]<br/>                 FS Date: 8/28/2019 1:19:00 PM</p> |                                   |              |    |                        |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_55096\_67101.jpg



Headwall and screw gate located on LS.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |                        |              |            |
|--|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start   | <b>3.83</b>                       | Rating **    | M                      | Issue No.    | <b>923</b> |
| LM End   | <b>3.83</b>                       | Issue Type + | Ma                     | Location *   |            |
| Category   | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|  |                                   |              | Start                  | End          |            |
| Item   | DRAFT DWR UCIP LMA Responsibility |              | 39.524350°             | 39.524350°   |            |
|  |                                   |              | -121.702180°           | -121.702180° |            |
| DWR ID   | 16847                             |              |                        |              |            |
| Comment Code   |                                   |              |                        |              |            |
| Inspector Comment  |                                   |              |                        |              |            |
| <p>DS_ID:16847<br/>                     FS_ID:55097<br/>                     EP_NO: N/A<br/>                     Repair Type: Non-Urgent<br/>                     Crossing Status: Found<br/>                     UCIP Comments: 08/28/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pending internal inspection under DMP Phase 1 both inlet and outlet underwater. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Both ends submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)04/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.07/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.05/29/2014 Same as last inspection.12/09/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.07/10/2013 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.04/19/2012 LS gate missing &amp; limited inspection. Need photos of WS &amp; 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 &amp; missing LS slide gate.<br/>                     FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 3.85)]<br/>                     FS Date: 8/28/2019 1:21:00 PM</p> |                                   |              |                        |              |            |



Overview looking south on left levee

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |    |                        |                   |
|----------|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start | <b>3.83</b>                       | Rating **    | M  | Issue No.              | <b>923 (cont)</b> |
| LM End   | <b>3.83</b>                       | Issue Type + | Ma | Location *             |                   |
| Category | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|          |                                   |              |    | Start                  | End               |
| Item     | DRAFT DWR UCIP LMA Responsibility |              |    | 39.524350°             | 39.524350°        |
|          |                                   |              |    | -121.702180°           | -121.702180°      |
| DWR ID   | 16847                             |              |    |                        |                   |

Comment Code

Inspector Comment

DS\_ID:16847  
 FS\_ID:55097  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/28/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pending internal inspection under DMP Phase 1 both inlet and outlet underwater. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Both ends submerged but crossing appears to be in good condition. (DWR Sutter Yard- A.Freitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- A.Freitag)04/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.07/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.05/29/2014 Same as last inspection.12/09/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.07/10/2013 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.04/19/2012 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.  
 FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]  
 FS Date: 8/28/2019 1:21:00 PM

Photo 2 of 3 : UCIP\_FA\_2019\_55097\_67108.jpg



Headwall and flap gate located on WS toe.

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







**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>4.17</b>                       | Rating **    | M  | Issue No.              | <b>924 (cont)</b> |
| LM End  | <b>4.17</b>                       | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.528210 °            | 39.528210 °       |
|   |                                   |              |    | -121.698410 °          | -121.698410 °     |
| DWR ID  | 16846                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16846<br/>                 FS_ID:55098<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/28/2019 Record remains Non-Urgent due to potential levee threat. Minor scour was visible on both WS and LS toe. No permit has been identified authorizing pipe. Pending internal inspection under DMP Phase 1 both inlet and outlet underwater. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- AFreitag)04/27/2016 Both pipe ends were underwater for inspection.07/01/2015 Both pipe ends and gates were fully submerged.05/29/2014 Same as last inspection.12/09/2013 Same as last inspection.07/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.04/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.<br/>                 FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 4.20)]<br/>                 FS Date: 8/28/2019 1:31:00 PM</p> |                                   |              |    |                        |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_55098\_67113.jpg



Overview of LS screw gate and concrete sump structure.

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













**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |                        |              |                   |
|--|-----------------------------------|--------------|------------------------|--------------|-------------------|
| LM Start   | <b>5.09</b>                       | Rating **    | M                      | Issue No.    | <b>929 (cont)</b> |
| LM End   | <b>5.09</b>                       | Issue Type + | Ma                     | Location *   |                   |
| Category   | Supplemental                      |              | GPS Latitude/Longitude |              |                   |
|  |                                   |              | Start                  | End          |                   |
| Item   | DRAFT DWR UCIP LMA Responsibility |              | 39.526917°             | 39.526917°   |                   |
|  |                                   |              | -121.689340°           | -121.689340° |                   |
| DWR ID   | 16408                             |              |                        |              |                   |
| Comment Code   |                                   |              |                        |              |                   |
| Inspector Comment  |                                   |              |                        |              |                   |
| <p>DS_ID:16408<br/>                 FS_ID:56101<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/28/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing pipe. Pipe has been lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/27/2016 Crossing appears to be in good condition.06/30/2015 Crossing appears to be in good condition. No apparent issues to report.05/29/2014 Same as last inspection.12/9/2013 Same as last inspection.07/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.04/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE_CESPK_M13H_2011_p_0026 for broken gate on LS.<br/>                 FIELD_STRUCT_DESC: 24-inch CIPP-lined corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 5.13)]<br/>                 FS Date: 8/28/2019 3:11:00 PM</p> |                                   |              |                        |              |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_56101\_67141.jpg



Overview of LS floor is higher in elevation than pipe invert causing build up sediment.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>5.29</b>                       | Rating **    | M  | Issue No.              | <b>930 (cont)</b> |
| LM End  | <b>5.29</b>                       | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.525958 °            | 39.525958 °       |
|   |                                   |              |    | -121.692730 °          | -121.692730 °     |
| DWR ID  | 16409                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16409<br/>                 FS_ID:56102<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/28/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Internal inspection under DMP Phase 1 is still pending, both inlet and outlet are underwater. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 There is a flap gate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard- AFreitag)04/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.06/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.05/29/2014 Same as last inspection.12/09/2013 Same as last inspection.07/09/2013 Same as last inspection.04/24/2012 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. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 5.34)]<br/>                 FS Date: 8/28/2019 3:22:00 PM</p> |                                   |              |    |                        |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_56102\_67149.jpg



View of WS headwall with dense vegetation in channel.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                         |              |                        |              |           |
|---|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start  | <b>5.35</b>             | Rating **    | M                      | Issue No.    | <b>57</b> |
| LM End  | <b>5.35</b>             | Issue Type + | Ma                     | Location *   | LS        |
| Category  | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|   |                         |              | Start                  | End          |           |
| Item  | Animal Control          |              | 39.525417°             | 39.525417°   |           |
|   |                         |              | -121.693537°           | -121.693537° |           |
| DWR ID  | DWR_MA0013_02_f_2019_57 |              |                        |              |           |
| Comment Code  |                         |              |                        |              |           |
| A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. |                         |              |                        |              |           |
| Inspector Comment   |                         |              |                        |              |           |
|   |                         |              |                        |              |           |

No Photos

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |      |            |                          |             |
|----------------------------|------|------------|--------------------------|-------------|
| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |               |            |
|---|-----------------------------------|--------------|------------------------|---------------|------------|
| LM Start  | <b>9.56</b>                       | Rating **    | M                      | Issue No.     | <b>941</b> |
| LM End  | <b>9.56</b>                       | Issue Type + | Ma                     | Location *    |            |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |               |            |
|   |                                   |              | Start                  | End           |            |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.477438 °            | 39.477438 °   |            |
|   |                                   |              | -121.735200 °          | -121.735200 ° |            |
| DWR ID  | 16838                             |              |                        |               |            |
| Comment Code  |                                   |              |                        |               |            |
| Inspector Comment   |                                   |              |                        |               |            |
| DS_ID:16838<br>FS_ID:55120<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/28/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing structure. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/27/2016 Crossing appears to be in good condition.06/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crossing looked in good condition.05/28/2014 Same as last inspection.12/04/2013 Same as last inspection.04/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.07/09/2013 Same as last inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]<br>FS Date: 8/28/2019 4:05:00 PM |                                   |              |                        |               |            |

Photo 1 of 3 : UCIP\_FA\_2019\_55120\_67280.jpg



Overview of levee crown at crossing looking D/S.

|          |             |              |    |            |                   |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | <b>9.56</b> | Rating **    | M  | Issue No.  | <b>941 (cont)</b> |
| LM End   | <b>9.56</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_55120\_67285.jpg



View of crossing looking from channel towards WS levee.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |      |            |                          |             |
|----------------------------|------|------------|--------------------------|-------------|
| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |               |                   |
|---|-----------------------------------|--------------|------------------------|---------------|-------------------|
| LM Start  | <b>9.56</b>                       | Rating **    | M                      | Issue No.     | <b>941 (cont)</b> |
| LM End  | <b>9.56</b>                       | Issue Type + | Ma                     | Location *    |                   |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |               |                   |
|   |                                   |              | Start                  | End           |                   |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.477438 °            | 39.477438 °   |                   |
|   |                                   |              | -121.735200 °          | -121.735200 ° |                   |
| DWR ID  | 16838                             |              |                        |               |                   |
| Comment Code  |                                   |              |                        |               |                   |
| Inspector Comment   |                                   |              |                        |               |                   |
| <p>DS_ID:16838<br/>                 FS_ID:55120<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/28/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing structure. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/27/2016 Crossing appears to be in good condition.06/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crossing looked in good condition.05/28/2014 Same as last inspection.12/04/2013 Same as last inspection.04/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.07/09/2013 Same as last inspection.<br/>                 FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 9.66)]<br/>                 FS Date: 8/28/2019 4:05:00 PM</p> |                                   |              |                        |               |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_55120\_67283.jpg



WS view-access well located 60 feet from WS toe.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |              |
|---|-----------------------------------|--------------|----|------------------------|--------------|
| LM Start  | <b>9.57</b>                       | Rating **    | M  | Issue No.              | <b>942</b>   |
| LM End  | <b>9.57</b>                       | Issue Type + | Ma | Location *             |              |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |              |
|   |                                   |              |    | Start                  | End          |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.477335°             | 39.477335°   |
|   |                                   |              |    | -121.735340°           | -121.735340° |
| DWR ID  | 16839                             |              |    |                        |              |
| Comment Code  |                                   |              |    |                        |              |
| Inspector Comment   |                                   |              |    |                        |              |
| DS_ID:16839<br>FS_ID:55118<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/28/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing structure. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/27/2016 Crossing appears to be in good condition.06/30/2015 WS flap gate is silted over and unable to open. Needs to be dug out.05/28/2014 Same as last inspection.12/04/2013 Slopes were cleared of vegetation and are in good condition.07/09/2013 Same as last inspection.04/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with cleared slopes.<br>FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)]<br>FS Date: 8/28/2019 4:05:00 PM |                                   |              |    |                        |              |

Photo 1 of 3 : UCIP\_FA\_2019\_55118\_67289.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 1 of 2)

|          |             |              |    |            |                   |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | <b>9.57</b> | Rating **    | M  | Issue No.  | <b>942 (cont)</b> |
| LM End   | <b>9.57</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_55118\_67287.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 2 of 2)

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |      |            |                          |             |
|----------------------------|------|------------|--------------------------|-------------|
| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |    |                        |                   |
|--|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start   | <b>9.57</b>                       | Rating **    | M  | Issue No.              | <b>942 (cont)</b> |
| LM End   | <b>9.57</b>                       | Issue Type + | Ma | Location *             |                   |
| Category   | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|  |                                   |              |    | Start                  | End               |
| Item   | DRAFT DWR UCIP LMA Responsibility |              |    | 39.477335 °            | 39.477335 °       |
|  |                                   |              |    | -121.735340 °          | -121.735340 °     |
| DWR ID   | 16839                             |              |    |                        |                   |
| Comment Code   |                                   |              |    |                        |                   |
| Inspector Comment  |                                   |              |    |                        |                   |
| DS_ID:16839<br>FS_ID:55118<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/28/2019 Record has been updated from No Action Needed to Non-Urgent, no permit has been identified authorizing structure. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)06/05/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)04/27/2016 Crossing appears to be in good condition.06/30/2015 WS flap gate is silted over and unable to open. Needs to be dug out.05/28/2014 Same as last inspection.12/04/2013 Slopes were cleared of vegetation and are in good condition.07/09/2013 Same as last inspection.04/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with cleared slopes. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)]<br>FS Date: 8/28/2019 4:05:00 PM |                                   |              |    |                        |                   |

Photo 3 of 3 : UCIP\_FA\_2019\_55118\_67286.jpg



View of crossing from LS. Dense vegetation along LS slope limited visual inspection. (LS Photo 1 of 2)

|   |                         |              |    |                        |               |
|---|-------------------------|--------------|----|------------------------|---------------|
| LM Start  | <b>10.71</b>            | Rating **    | C  | Issue No.              | <b>77</b>     |
| LM End  | <b>10.71</b>            | Issue Type + | Ma | Location *             | LS            |
| Category  | Earthen Levee           |              |    | GPS Latitude/Longitude |               |
|   |                         |              |    | Start                  | End           |
| Item  | Trim / Thin Trees       |              |    | 39.462633 °            | 39.462633 °   |
|   |                         |              |    | -121.745234 °          | -121.745234 ° |
| DWR ID  | DWR_MA0013_02_s_2019_77 |              |    |                        |               |
| Comment Code  |                         |              |    |                        |               |
| T1 : Trim trees to at least five feet above ground level. |                         |              |    |                        |               |
| Inspector Comment   |                         |              |    |                        |               |

No Photos

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                         |              |                        |              |           |
|---|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start  | <b>10.77</b>            | Rating **    | M                      | Issue No.    | <b>76</b> |
| LM End  | <b>10.77</b>            | Issue Type + | Ma                     | Location *   | LS        |
| Category  | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|   |                         |              | Start                  | End          |           |
| Item  | Trim / Thin Trees       |              | 39.461876°             | 39.461876°   |           |
|   |                         |              | -121.745735°           | -121.745735° |           |
| DWR ID  | DWR_MA0013_02_s_2019_76 |              |                        |              |           |
| Comment Code  |                         |              |                        |              |           |
| T1 : Trim trees to at least five feet above ground level. |                         |              |                        |              |           |
| Inspector Comment   |                         |              |                        |              |           |
|   |                         |              |                        |              |           |

No Photos

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



















**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                         |              |    |                        |              |
|---|-------------------------|--------------|----|------------------------|--------------|
| LM Start  | <b>16.52</b>            | Rating **    | C  | Issue No.              | <b>54</b>    |
| LM End  | <b>16.52</b>            | Issue Type + | Ma | Location *             | WS           |
| Category  | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|   |                         |              |    | Start                  | End          |
| Item  | Animal Control          |              |    | 39.409548°             | 39.409548°   |
|   |                         |              |    | -121.789668°           | -121.789668° |
| DWR ID  | DWR_MA0013_02_f_2014_54 |              |    |                        |              |
| Comment Code  |                         |              |    |                        |              |
| A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. |                         |              |    |                        |              |
| Inspector Comment   |                         |              |    |                        |              |
|   |                         |              |    |                        |              |

No Photos

|   |                         |              |    |                        |              |
|---|-------------------------|--------------|----|------------------------|--------------|
| LM Start  | <b>17.41</b>            | Rating **    | N  | Issue No.              | <b>67</b>    |
| LM End  | <b>17.41</b>            | Issue Type + | Ma | Location *             | LS           |
| Category  | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|   |                         |              |    | Start                  | End          |
| Item  | Trim / Thin Trees       |              |    | 39.401331°             | 39.401331°   |
|   |                         |              |    | -121.802480°           | -121.802480° |
| DWR ID  | DWR_MA0013_02_f_2016_67 |              |    |                        |              |
| Comment Code  |                         |              |    |                        |              |
| T5 : Tree stumps.   |                         |              |    |                        |              |
| Inspector Comment   |                         |              |    |                        |              |
| Approximately eight stumps are present at the landside toe. |                         |              |    |                        |              |

No Photos

|                                |                         |              |    |                        |              |
|--------------------------------|-------------------------|--------------|----|------------------------|--------------|
| LM Start                       | <b>17.63</b>            | Rating **    | M  | Issue No.              | <b>69</b>    |
| LM End                         | <b>17.65</b>            | Issue Type + | Ma | Location *             | LS           |
| Category                       | Earthen Levee           |              |    | GPS Latitude/Longitude |              |
|                                |                         |              |    | Start                  | End          |
| Item                           | Slope Stability         |              |    | 39.399319°             | 39.399147°   |
|                                |                         |              |    | -121.805524°           | -121.805783° |
| DWR ID                         | DWR_MA0013_02_f_2016_69 |              |    |                        |              |
| Comment Code                   |                         |              |    |                        |              |
| S1 : Repair slope instability. |                         |              |    |                        |              |
| Inspector Comment              |                         |              |    |                        |              |
|                                |                         |              |    |                        |              |

Photo 1 of 1 : FA\_2019\_MA0013\_301\_69\_20190822\_00014.jpg



View of slope instability issue along the landside slope.

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







**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |                        |              |            |
|---|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start  | <b>19.92</b>                      | Rating **    | M                      | Issue No.    | <b>959</b> |
| LM End  | <b>19.92</b>                      | Issue Type + | Ma                     | Location *   |            |
| Category  | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|   |                                   |              | Start                  | End          |            |
| Item  | DRAFT DWR UCIP LMA Responsibility |              | 39.378198°             | 39.378198°   |            |
|   |                                   |              | -121.838570°           | -121.838570° |            |
| DWR ID  | 16375                             |              |                        |              |            |
| Comment Code  |                                   |              |                        |              |            |
| Inspector Comment   |                                   |              |                        |              |            |
| DS_ID:16375<br>FS_ID:55135<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/29/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pipe is scheduled to be lined. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)05/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)04/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.06/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/04/2013 Same as last inspection.05/28/2014 Same as last inspection.07/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.04/24/2012 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.<br>FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)]<br>FS Date: 8/29/2019 7:38:00 AM |                                   |              |                        |              |            |

Photo 1 of 3 : UCIP\_FA\_2019\_55135\_67401.jpg



Erosion behind WS headwall looking at the downstream edge of headwall.

|          |              |              |    |            |                   |
|----------|--------------|--------------|----|------------|-------------------|
| LM Start | <b>19.92</b> | Rating **    | M  | Issue No.  | <b>959 (cont)</b> |
| LM End   | <b>19.92</b> | Issue Type + | Ma | Location * |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_55135\_67400.jpg



Erosion behind WS headwall at the upstream edge of headwall.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector      |
|----------------------------|------|------------|--------------------------|----------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar<br>Sokol |

|   |                        |              |                        |              |          |
|---|------------------------|--------------|------------------------|--------------|----------|
| LM Start  | <b>20.43</b>           | Rating **    | C                      | Issue No.    | <b>6</b> |
| LM End  | <b>20.74</b>           | Issue Type + | Ma                     | Location *   | LS       |
| Category  | Earthen Levee          |              | GPS Latitude/Longitude |              |          |
|   |                        |              | Start                  | End          |          |
| Item  | Trim / Thin Trees      |              | 39.373091°             | 39.370795°   |          |
|   |                        |              | -121.845225°           | -121.850124° |          |
| DWR ID  | DWR_MA0013_02_s_2013_6 |              |                        |              |          |
| Comment Code  |                        |              |                        |              |          |
| T1 : Trim trees to at least five feet above ground level. |                        |              |                        |              |          |
| Inspector Comment   |                        |              |                        |              |          |
|   |                        |              |                        |              |          |

No Photos

|  |                         |              |                        |              |           |
|--|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start   | <b>20.52</b>            | Rating **    | M                      | Issue No.    | <b>73</b> |
| LM End   | <b>20.52</b>            | Issue Type + | Ma                     | Location *   | LS        |
| Category   | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|  |                         |              | Start                  | End          |           |
| Item   | Encroachments           |              | 39.372486°             | 39.372486°   |           |
|  |                         |              | -121.846537°           | -121.846537° |           |
| DWR ID   | DWR_MA0013_02_f_2016_73 |              |                        |              |           |
| Comment Code   |                         |              |                        |              |           |
| TR : Tree or limb                                      |                         |              |                        |              |           |
| Inspector Comment                                      |                         |              |                        |              |           |
| Remove the tree limbs from the landside slope and toe. |                         |              |                        |              |           |
|  |                         |              |                        |              |           |

No Photos

|   |                         |              |                        |              |           |
|---|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start                                  | <b>20.59</b>            | Rating **    | M                      | Issue No.    | <b>66</b> |
| LM End                                    | <b>20.59</b>            | Issue Type + | Ma                     | Location *   | LS        |
| Category                                  | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|   |                         |              | Start                  | End          |           |
| Item                                      | Encroachments           |              | 39.371955°             | 39.371955°   |           |
|   |                         |              | -121.847714°           | -121.847714° |           |
| DWR ID                                    | DWR_MA0013_02_s_2019_66 |              |                        |              |           |
| Comment Code                              |                         |              |                        |              |           |
| TR : Tree or limb                         |                         |              |                        |              |           |
| Inspector Comment                         |                         |              |                        |              |           |
| Remove the trees from the landside slope. |                         |              |                        |              |           |
|   |                         |              |                        |              |           |

No Photos

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                         |              |                        |              |           |
|--|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start   | <b>20.70</b>            | Rating **    | M                      | Issue No.    | <b>52</b> |
| LM End   | <b>20.70</b>            | Issue Type + | Ma                     | Location *   | LS        |
| Category   | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|  |                         |              | Start                  | End          |           |
| Item   | Encroachments           |              | 39.371108°             | 39.371108°   |           |
|  |                         |              | -121.849520°           | -121.849520° |           |
| DWR ID   | DWR_MA0013_02_s_2014_52 |              |                        |              |           |
| Comment Code   |                         |              |                        |              |           |
| TR : Tree or limb                                      |                         |              |                        |              |           |
| Inspector Comment                                      |                         |              |                        |              |           |
| Remove the tree limbs from the landside slope and toe. |                         |              |                        |              |           |

No Photos

|                   |                         |              |                        |              |           |
|-------------------|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start          | <b>20.74</b>            | Rating **    | N                      | Issue No.    | <b>74</b> |
| LM End            | <b>20.74</b>            | Issue Type + | Ma                     | Location *   | LS        |
| Category          | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|                   |                         |              | Start                  | End          |           |
| Item              | Trim / Thin Trees       |              | 39.370796°             | 39.370796°   |           |
|                   |                         |              | -121.850124°           | -121.850124° |           |
| DWR ID            | DWR_MA0013_02_f_2016_74 |              |                        |              |           |
| Comment Code      |                         |              |                        |              |           |
| T5 : Tree stumps. |                         |              |                        |              |           |
| Inspector Comment |                         |              |                        |              |           |

No Photos

|  |                         |              |                        |              |           |
|--|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start   | <b>20.77</b>            | Rating **    | M                      | Issue No.    | <b>75</b> |
| LM End   | <b>20.77</b>            | Issue Type + | Ma                     | Location *   | WS        |
| Category   | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|  |                         |              | Start                  | End          |           |
| Item   | Erosion / Bank Caving   |              | 39.370641°             | 39.370641°   |           |
|  |                         |              | -121.850572°           | -121.850572° |           |
| DWR ID   | DWR_MA0013_02_f_2016_75 |              |                        |              |           |
| Comment Code   |                         |              |                        |              |           |
| E2 : Schedule repair of erosion site prior to the next inspection. |                         |              |                        |              |           |
| Inspector Comment  |                         |              |                        |              |           |

Photo 1 of 1 : FA\_2019\_MA0013\_301\_75\_20190822\_00015.jpg



View of the erosion along the waterside toe.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |                        |              |            |
|----------|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start | <b>21.35</b>                      | Rating **    | M                      | Issue No.    | <b>963</b> |
| LM End   | <b>21.35</b>                      | Issue Type + | Ma                     | Location *   |            |
| Category | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|          |                                   |              | Start                  | End          |            |
| Item     | DRAFT DWR UCIP LMA Responsibility |              | 39.366155°             | 39.366155°   |            |
|          |                                   |              | -121.859880°           | -121.859880° |            |
| DWR ID   | 16384                             |              |                        |              |            |

**Comment Code**

**Inspector Comment**

DS\_ID:16384  
 FS\_ID:55413  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/29/2019 Record remains Non-Urgent due to unauthorized encroachment with recent modifications. Structure type needs to be corrected from Drainage to Irrigation. During inspection water was flowing from WS to LS to irrigate the rice fields. Structure has been modified since 2012, unable to determine extent of repair through levee. Need to contact owner to determine section replaced through levee. Structure is not maintained or operated by LMA-DWR Sutter Yard. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)05/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - A.Freitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - A.Freitag)04/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.06/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.05/28/2014 Same as last inspection.12/04/2013 Same as last inspection.07/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more details on repair.04/24/2012 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.  
 FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (24-inch CMP authorized to match existing 24-inch CMP through left bank under Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]  
 FS Date: 8/29/2019 7:39:00 AM



Overview of crossing looking downstream.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |      |            |                          |             |
|----------------------------|------|------------|--------------------------|-------------|
| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|          |                                   |              |    |                        |                   |
|----------|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start | <b>21.35</b>                      | Rating **    | M  | Issue No.              | <b>963 (cont)</b> |
| LM End   | <b>21.35</b>                      | Issue Type + | Ma | Location *             |                   |
| Category | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|          |                                   |              |    | Start                  | End               |
| Item     | DRAFT DWR UCIP LMA Responsibility |              |    | 39.366155°             | 39.366155°        |
|          |                                   |              |    | -121.859880°           | -121.859880°      |
| DWR ID   | 16384                             |              |    |                        |                   |

Comment Code

Inspector Comment

DS\_ID:16384  
 FS\_ID:55413  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Found  
 UCIP Comments: 08/29/2019 Record remains Non-Urgent due to unauthorized encroachment with recent modifications. Structure type needs to be corrected from Drainage to Irrigation. During inspection water was flowing from WS to LS to irrigate the rice fields. Structure has been modified since 2012, unable to determine extent of repair through levee. Need to contact owner to determine section replaced through levee. Structure is not maintained or operated by LMA-DWR Sutter Yard. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)05/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - A.Freitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - A.Freitag)04/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.06/30/2015 Pipe is currently undergoing repairs. Not sure what all is planned to be fixed but will update the photos and inspection report with new details when its completed.05/28/2014 Same as last inspection.12/04/2013 Same as last inspection.07/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more details on repair.04/24/2012 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.  
 FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (24-inch CMP authorized to match existing 24-inch CMP through left bank under Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]  
 FS Date: 8/29/2019 7:39:00 AM

Photo 2 of 3 : UCIP\_FA\_2019\_55413\_67451.jpg



View of WS daylight. Hole present at pipe daylight.

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



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |      |            |                          |             |
|----------------------------|------|------------|--------------------------|-------------|
| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|  |                                   |              |                        |              |            |
|--|-----------------------------------|--------------|------------------------|--------------|------------|
| LM Start   | <b>21.83</b>                      | Rating **    | M                      | Issue No.    | <b>965</b> |
| LM End   | <b>21.83</b>                      | Issue Type + | Ma                     | Location *   |            |
| Category   | Supplemental                      |              | GPS Latitude/Longitude |              |            |
|  |                                   |              | Start                  | End          |            |
| Item   | DRAFT DWR UCIP LMA Responsibility |              | 39.362378°             | 39.362378°   |            |
|  |                                   |              | -121.867350°           | -121.867350° |            |
| DWR ID   | 16394                             |              |                        |              |            |
| Comment Code   |                                   |              |                        |              |            |
| Inspector Comment  |                                   |              |                        |              |            |
| DS_ID:16394<br>FS_ID:55414<br>EP_NO: N/A<br>Repair Type: Non-Urgent<br>Crossing Status: Found<br>UCIP Comments: 08/29/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pipe has been lined and a new flap gate has been installed on the WS. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)05/30/2017 WS flap gate showing signs of rusting and deterioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)04/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.06/30/2015 Crossing is in good condition. No noticeable issues to be reported.05/28/2014 Same as last inspection.12/04/2013 WS and LS slopes are in good condition.07/08/2013 Same as last inspection.04/24/2012 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_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch CIPP-lined corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)]<br>FS Date: 8/29/2019 7:40:00 AM |                                   |              |                        |              |            |

Photo 1 of 3 : UCIP\_FA\_2019\_55414\_67462.jpg



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

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

|                            |      |            |                          |             |
|----------------------------|------|------------|--------------------------|-------------|
| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                                   |              |    |                        |                   |
|---|-----------------------------------|--------------|----|------------------------|-------------------|
| LM Start  | <b>21.83</b>                      | Rating **    | M  | Issue No.              | <b>965 (cont)</b> |
| LM End  | <b>21.83</b>                      | Issue Type + | Ma | Location *             |                   |
| Category  | Supplemental                      |              |    | GPS Latitude/Longitude |                   |
|   |                                   |              |    | Start                  | End               |
| Item  | DRAFT DWR UCIP LMA Responsibility |              |    | 39.362378 °            | 39.362378 °       |
|   |                                   |              |    | -121.867350 °          | -121.867350 °     |
| DWR ID  | 16394                             |              |    |                        |                   |
| Comment Code  |                                   |              |    |                        |                   |
| Inspector Comment   |                                   |              |    |                        |                   |
| <p>DS_ID:16394<br/>                 FS_ID:55414<br/>                 EP_NO: N/A<br/>                 Repair Type: Non-Urgent<br/>                 Crossing Status: Found<br/>                 UCIP Comments: 08/29/2019 Record remains Non-Urgent, no permit has been identified authorizing pipe. Pipe has been lined and a new flap gate has been installed on the WS. (O. Magana - DWR UCIP, A. Freitag - DWR Sutter Yard)05/30/2017 WS flap gate showing signs of rusting and deterioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)04/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.06/30/2015 Crossing is in good condition. No noticeable issues to be reported.05/28/2014 Same as last inspection.12/04/2013 WS and LS slopes are in good condition.07/08/2013 Same as last inspection.04/24/2012 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_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch CIPP-lined corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&amp;M Manual 519, June 1962 (HLM 22.08)]<br/>                 FS Date: 8/29/2019 7:40:00 AM</p> |                                   |              |    |                        |                   |

Photo 2 of 3 : UCIP\_FA\_2019\_55414\_67460.jpg



View of WS headwall.

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









**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|   |                         |              |                        |              |           |
|---|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start  | <b>22.32</b>            | Rating **    | M                      | Issue No.    | <b>63</b> |
| LM End  | <b>22.32</b>            | Issue Type + | Ma                     | Location *   | LS        |
| Category  | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|   |                         |              | Start                  | End          |           |
| Item  | Encroachments           |              | 39.358453°             | 39.358453°   |           |
|   |                         |              | -121.875030°           | -121.875030° |           |
| DWR ID  | DWR_MA0013_02_s_2019_63 |              |                        |              |           |
| Comment Code  |                         |              |                        |              |           |
| TR : Tree or limb   |                         |              |                        |              |           |
| Inspector Comment   |                         |              |                        |              |           |
| Remove the fallen trees along the landside slope and toe. |                         |              |                        |              |           |

No Photos

|                                |                         |              |                        |              |           |
|--------------------------------|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start                       | <b>22.33</b>            | Rating **    | A/W                    | Issue No.    | <b>62</b> |
| LM End                         | <b>22.33</b>            | Issue Type + | Ma                     | Location *   | LS        |
| Category                       | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|                                |                         |              | Start                  | End          |           |
| Item                           | Slope Stability         |              | 39.358419°             | 39.358419°   |           |
|                                |                         |              | -121.875088°           | -121.875088° |           |
| DWR ID                         | DWR_MA0013_02_s_2016_62 |              |                        |              |           |
| Comment Code                   |                         |              |                        |              |           |
| S1 : Repair slope instability. |                         |              |                        |              |           |
| Inspector Comment              |                         |              |                        |              |           |

Photo 1 of 1 : FA\_2019\_MA0013\_301\_62\_20190822\_00012.jpg



View of slope instability issue along the landside slope.

|  |                         |              |                        |              |           |
|--|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start   | <b>22.50</b>            | Rating **    | U                      | Issue No.    | <b>58</b> |
| LM End   | <b>22.51</b>            | Issue Type + | Ma                     | Location *   | LS        |
| Category   | Earthen Levee           |              | GPS Latitude/Longitude |              |           |
|  |                         |              | Start                  | End          |           |
| Item   | Erosion / Bank Caving   |              | 39.357085°             | 39.357033°   |           |
|  |                         |              | -121.877812°           | -121.877901° |           |
| DWR ID   | DWR_MA0013_02_f_2019_58 |              |                        |              |           |
| Comment Code   |                         |              |                        |              |           |
| E2 : Schedule repair of erosion site prior to the next inspection. |                         |              |                        |              |           |
| Inspector Comment  |                         |              |                        |              |           |

Photo 1 of 1 : FA\_2019\_MA0013\_301\_58\_20191028\_00128.jpg



View of erosion on the landside slope. Fall 2019.

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

**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2019**

**Sutter Maintenance Yard Maintenance Area 0013**

| Waterway                   | Bank | Unit Miles | Inspection Start/End     | Inspector   |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 02 Cherokee Canal | Left | 22.84      | 10/24/2019<br>10/24/2019 | Makar Sokol |

|                                |                         |              |    |                        |               |
|--------------------------------|-------------------------|--------------|----|------------------------|---------------|
| LM Start                       | <b>22.54</b>            | Rating **    | M  | Issue No.              | <b>60</b>     |
| LM End                         | <b>22.54</b>            | Issue Type + | Ma | Location *             | LS            |
| Category                       | Earthen Levee           |              |    | GPS Latitude/Longitude |               |
|                                |                         |              |    | Start                  | End           |
| Item                           | Slope Stability         |              |    | 39.356780 °            | 39.356780 °   |
|                                |                         |              |    | -121.878422 °          | -121.878422 ° |
| DWR ID                         | DWR_MA0013_02_f_2019_60 |              |    |                        |               |
| Comment Code                   |                         |              |    |                        |               |
| S1 : Repair slope instability. |                         |              |    |                        |               |
| Inspector Comment              |                         |              |    |                        |               |
|                                |                         |              |    |                        |               |

Photo 1 of 1 : FA\_2019\_MA0013\_301\_60\_20191028\_00129.jpg



View of sloughing on the landside slope. Fall 2019.

|  |                         |              |    |                        |               |
|--|-------------------------|--------------|----|------------------------|---------------|
| LM Start   | <b>22.58</b>            | Rating **    | U  | Issue No.              | <b>61</b>     |
| LM End   | <b>22.58</b>            | Issue Type + | Ma | Location *             | LS            |
| Category   | Earthen Levee           |              |    | GPS Latitude/Longitude |               |
|  |                         |              |    | Start                  | End           |
| Item   | Erosion / Bank Caving   |              |    | 39.356476 °            | 39.356476 °   |
|  |                         |              |    | -121.879089 °          | -121.879089 ° |
| DWR ID   | DWR_MA0013_02_s_2019_61 |              |    |                        |               |
| Comment Code   |                         |              |    |                        |               |
| E2 : Schedule repair of erosion site prior to the next inspection. |                         |              |    |                        |               |
| Inspector Comment  |                         |              |    |                        |               |
|  |                         |              |    |                        |               |

Photo 1 of 1 : FA\_2019\_MA0013\_301\_61\_20190822\_00011.jpg



View of the erosion at the landside shoulder and slope. Spring 2019.

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