

**Flood Control Project Maintenance
Levee Inspections**

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

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			o	o
				o	o
DWR ID	DWR_MA0003_01_s_2013_4				
Comment Code					
Inspector Comment					
Sutter Yard has a copy of the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	6
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			o	o
				o	o
DWR ID	DWR_MA0003_01_s_2013_6				
Comment Code					
Inspector Comment					
The Sutter Yard has adequate flood fight supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			o	o
				o	o
DWR ID	DWR_MA0003_01_s_2013_7				
Comment Code					
Inspector Comment					
The Sutter Yard has received flood fight training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	0.01	Rating **	A	Issue No.	11
LM End	4.11	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.897889°	38.936840°
				-121.617985°	-121.589000°
DWR ID	DWR_MA0003_01_f_2019_11				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
The annual vegetation is well maintained, Fall 2019.					

Photo 1 of 1 : FA_2019_MA0003_195_11_20190912_00020.jpg



View looking upstream landside at the well maintained vegetation, Fall 2019.

LM Start	0.01	Rating **	A	Issue No.	12
LM End	4.11	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.897889°	38.936840°
				-121.617985°	-121.589000°
DWR ID	DWR_MA0003_01_f_2019_12				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
The annual vegetation is well maintained, Fall 2019.					

Photo 1 of 1 : FA_2019_MA0003_195_12_20190912_00021.jpg



View looking upstream waterside at the well maintained vegetation, Fall 2019.

LM Start	0.69	Rating **	C	Issue No.	17
LM End	0.69	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.903352°	38.903352°
				-121.607829°	-121.607829°
DWR ID	DWR_MA0003_01_s_2017_17				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
The existing animal hole that was on the outside edge of the landside patrol road no longer is visible and does not appear to have any recent animal activity, Fall 2019.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	0.81	Rating **	U	Issue No.	19
LM End	0.81	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.903264 °	38.903264 °
				-121.605698 °	-121.605698 °
DWR ID	17092				

Comment Code

Inspector Comment

DS_ID:17092
 FS_ID:54171
 EP_NO: N/A
 Repair Type: Urgent
 Crossing Status: Found
 UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP)
 04/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are still in place and condition of flap gates is unknown. (DWR Sutter Yard - AFreitag)10/10/2016 WS pipe end was underwater for inspection but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)04/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)05/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)05/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)05/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP - W. Wylie)
 FIELD_STRUCT_DESC: 1 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].
 FS Date: 5/1/2019 2:50:00 PM

Photo 1 of 3 : UCIP_FA_2019_54171_64649.jpg



Concrete headwall with walkway and slide gates at LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	0.81	Rating **	U	Issue No.	19 (cont)
LM End	0.81	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.903264 °	38.903264 °
				-121.605698 °	-121.605698 °
DWR ID	17092				

Photo 2 of 3 : UCIP_FA_2019_54171_64648.jpg



Concrete U shaped headwall on WS toe filled in with Sandbags. 16-inch pipe shown over top of headwall.

Comment Code

Inspector Comment

DS_ID:17092
 FS_ID:54171
 EP_NO: N/A
 Repair Type: Urgent
 Crossing Status: Found
 UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP)
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 FS Date: 5/1/2019 2:50:00 PM

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Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	0.81	Rating **	U	Issue No.	20 (cont)
LM End	0.81	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.903264 °	38.903264 °
				-121.605698 °	-121.605698 °
DWR ID	17136				

Photo 2 of 3 : UCIP_FA_2019_56067_64661.jpg



Concrete U shaped headwall on WS toe filled with sandbags.

Comment Code

Inspector Comment

DS_ID:17136
 FS_ID:56067
 EP_NO: N/A
 Repair Type: Urgent
 Crossing Status: Found
 UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP)
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 FIELD_STRUCT_DESC: 2 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].
 FS Date: 5/1/2019 2:51:00 PM

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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LM Start	0.81	Rating **	U	Issue No.	20 (cont)
LM End	0.81	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.903264 °	38.903264 °
				-121.605698 °	-121.605698 °
DWR ID	17136				
Comment Code					
Inspector Comment					
<p>DS_ID:17136 FS_ID:56067 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 05/01/2019 Same as last inspection, record remains Urgent due to the potential of levee integrity issues on the LS. Dense vegetation on both the WS and LS limits the inspection to determine if sink hole or erosion behind headwall on LS has progressed. No permit has been identified for this structure. Structure has been abandoned. (O. Magana - DWR UCIP)10/04/2018 Sink hole observed between the dual 18-inch pipes located on the LS near the concrete headwall. Erosion was also observed behind the concrete headwall located on the LS. Inlet of dual 18-inch pipes was still covered by filled sandbags. Crossing remains Urgent due to the sink hole and erosion visible on the LS. These crossings were recommended for replacement under the SBFCA project; however, no work has been done to date. Recommend monitoring site and coordinating with SBFCA to determine the status of the project. (O. Magana - DWR UCIP) 04/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are still in place and condition of flap gates is unknown. (DWR Sutter Yard - AFreitag)10/10/2016 WS pipe end was underwater for the inspection but the sandbags appear to still be in place. (DWR Sutter Yard - afreitag)04/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)05/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)05/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)05/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP - W. Wylie) FIELD_STRUCT_DESC: 2 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)]. FS Date: 5/1/2019 2:51:00 PM</p>					

Photo 3 of 3 : UCIP_FA_2019_56067_64660.jpg



Flap gates appear to be missing from U shaped headwall. Sandbags fill headwall but water flows heavily from LS.

<p>* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown</p>	<p>** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable</p>	<p>N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain</p>	<p>+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement</p>
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	1.86	Rating **	M	Issue No.	14
LM End	1.86	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Trim / Thin Trees		38.907820°	38.907820°	
			-121.589000°	-121.589000°	
DWR ID	DWR_MA0003_01_f_2019_14				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Tree limbs need to be trimmed, Fall 2019.					

Photo 1 of 1 : FA_2019_MA0003_195_14_20190912_00023.jpg



View looking downstream landside of tree limbs that need to be trimmed, Fall 2019.

LM Start	4.11	Rating **	A/W	Issue No.	15
LM End	5.10	Issue Type +	Ma	Location *	CR
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Crown Surface / Depressions / Rutting		38.936840°	38.950762°	
			-121.589000°	-121.585810°	
DWR ID	DWR_MA0003_01_f_2019_15				
Comment Code					
C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.					
Inspector Comment					
Under construction on this portion of levee, Fall 2019.					

Photo 1 of 1 : FA_2019_MA0003_195_15_20190912_00024.jpg



View looking upstream at the portion of levee that is under construction, Fall 2019.

LM Start	4.15	Rating **	A/W	Issue No.	16
LM End	4.18	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 USACE Erosion Survey		38.937451°	38.937937°	
			-121.588512°	-121.588471°	
DWR ID					
Comment Code					
Inspector Comment					
2017 Site ID: FHR 12.3 R Status: Under Construction 2017 Field Notes: Under construction. work in progress. Site History: 2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	09/04/2019 09/04/2019	Sterling York

LM Start	4.71	Rating **	A/W	Issue No.	18
LM End	4.76	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey			38.945188°	38.945958°
				-121.586096°	-121.586394°
DWR ID					
Comment Code					
Inspector Comment					
2017 Site ID: FHR 12.8 R Status: Under Construction 2017 Field Notes: Under construction. work in progress. Site History: 2013 - Minor toe scour causing gradual erosion into the bank slope.					

No Photos

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