

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 North Levee	Left	11.69	03/09/2021 03/09/2021	Zach Jojola

LM Start		Rating **	A	Issue No.	2
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_ST0001_01_s_2013_2				
Comment Code					
Inspector Comment					
The Sacramento Maintenance Yard has copies of the O&M Manuals.					

No Photos

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_ST0001_01_s_2013_5				
Comment Code					
Inspector Comment					
The Sacramento Maintenance Yard maintains a stockpile of flood fight materials.					

No Photos

LM Start		Rating **	A	Issue No.	21
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_ST0001_01_s_2013_21				
Comment Code					
Inspector Comment					
The Sacramento Maintenance Yard remain current on their emergency response training and practices.					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 North Levee	Left	11.69	03/09/2021 03/09/2021	Zach Jojola

LM Start	1.30	Rating **	C	Issue No.	25
LM End	1.30	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		38.722142 °	38.722142 °	
			-121.809913 °	-121.809913 °	
DWR ID	DWR_ST0001_01_f_2020_25				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Rodent holes on the landside slope.					

No Photos

LM Start	1.33	Rating **	M	Issue No.	28
LM End	1.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		38.722312 °	38.722312 °	
			-121.809452 °	-121.809452 °	
DWR ID	DWR_ST0001_01_s_2021_28				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Rodent holes are on the landside slope.					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 North Levee	Left	11.69	03/09/2021 03/09/2021	Zach Jojola

LM Start	2.57	Rating **	A/W	Issue No.	30
LM End	2.61	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey			38.732836 °	38.732685 °
				-121.797893 °	-121.797154 °
DWR ID	DWR_ST0001_01_f_2018_30				

Comment Code

Inspector Comment

2017 Site ID: CHC 2.4 L
Status: Critical
2017 Field Notes: No observed change.
Site History: Site identified as CRITICAL in 2002. 2006 - Currently constructing a setback levee. New failures present and extensive. Downstream end of the setback levee did not extend far enough. Upstream end was repaired. 2007 - DWR repaired with a setback levee, but the levee did not go far enough downstream. 2012 - New cracks observed. 2013 - Fresh erosion on upper bank.

LM Start	2.57	Rating **	A/W	Issue No.	30 (cont)
LM End	2.61	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SP_2021_ST0001_259_30_20210308_00018.jpg



View of erosion on the waterside toe road. Fall 2018.

Photo 2 of 3 : SP_2021_ST0001_259_30_20210308_00019.jpg



Additional view of the erosion, facing downstream. Fall 2018.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 North Levee	Left	11.69	03/09/2021 03/09/2021	Zach Jojola

LM Start	2.57	Rating **	A/W	Issue No.	30 (cont)
LM End	2.61	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey			38.732836 °	38.732685 °
				-121.797893 °	-121.797154 °
DWR ID	DWR_ST0001_01_f_2018_30				

Photo 3 of 3 : SP_2021_ST0001_259_30_20210308_00020.jpg



USACE 2013 Photo #1

LM Start	2.84	Rating **	A/W	Issue No.	62
LM End	2.84	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.734514 °	38.734514 °
				-121.793418 °	-121.793418 °
DWR ID	DWR_ST0001_01_s_2018_62				

Comment Code

E1 : Note and monitor erosion site.

Inspector Comment

Erosion is occurring on the waterside berm and toe road. Approximately 120 feet from the landside toe and not within the prism.

Photo 1 of 2 : SP_2021_ST0001_259_62_20210308_00035.jpg



View of erosion looking towards the landside levee slope, facing northeast. Spring 2018.

LM Start	2.84	Rating **	A/W	Issue No.	62 (cont)
LM End	2.84	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2021_ST0001_259_62_20210308_00037.jpg



View of erosion from levee crown, facing Cache Creek. Fall 2018.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 North Levee	Left	11.69	03/09/2021 03/09/2021	Zach Jojola

LM Start	4.22	Rating **	A/W	Issue No.	34
LM End	4.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.727207 °	38.727187 °
				-121.775521 °	-121.775450 °
DWR ID	LMA-57				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion is occurring on the waterside berm and toe road. Approximately 80 feet from the landside toe and not within the prism.					
Site ID No:249					
Site Designation:LMA-57					

Photo 1 of 2 : LEVAL_SP_2021_249_954.jpg



LM Start	4.22	Rating **	A/W	Issue No.	34 (cont)
LM End	4.23	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : LEVAL_SP_2021_249_959.jpg



LM Start	7.69	Rating **	M	Issue No.	29
LM End	7.69	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.729027 °	38.729027 °
				-121.721683 °	-121.721683 °
DWR ID	DWR_ST0001_01_s_2015_29				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 South Levee	Right	11.48	03/09/2021 03/09/2021	Zach Jojola

LM Start	0.18	Rating **	N	Issue No.	10
LM End	0.18	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.729560 °	38.729560 °
				-121.805231 °	-121.805231 °
DWR ID	DWR_ST0001_02_f_2015_10				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
The stump is located at the levee toe.					

Photo 1 of 1 : SP_2021_ST0001_260_10_20210308_00007.jpg



View of the tree stump at the landward side of the levee looking downstream. Fall 2015.

LM Start	0.27	Rating **	N	Issue No.	6
LM End	0.27	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.730723 °	38.730723 °
				-121.804972 °	-121.804972 °
DWR ID	DWR_ST0001_02_s_2014_6				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
A large black walnut tree stump is at the toe of the levee.					

Photo 1 of 1 : SP_2021_ST0001_260_6_20210308_00004.jpg



View of large black walnut tree stump is at the landside toe. Spring 2014

LM Start	1.60	Rating **	A/W	Issue No.	16
LM End	1.60	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.731659 °	38.731577 °
				-121.785931 °	-121.785936 °
DWR ID	ST1-01				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion is on the bank and is starting to cut into the WS toe road. Approximately 55 feet from the landside toe.					
Site ID No:181					
Site Designation:ST1-01					

Photo 1 of 1 : SP_2021_ST0001_260_16_20210308_00010.jpg



View of storm damage site on waterside berm. Does not appear to be within the levee prism at this time. Fall 2017.

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 South Levee	Right	11.48	03/09/2021 03/09/2021	Zach Jojola

LM Start	1.64	Rating **	M	Issue No.	5
LM End	1.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.731011 °	38.731011 °
				-121.786228 °	-121.786228 °
DWR ID	DWR_ST0001_02_s_2021_5				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Rodent holes are on the landside slope.					

No Photos

LM Start	1.68	Rating **	M	Issue No.	4
LM End	1.68	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.730507 °	38.730507 °
				-121.785972 °	-121.785972 °
DWR ID	DWR_ST0001_02_s_2021_4				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Rodent holes are on the landside slope.					

Photo 1 of 1 : SP_2021_ST0001_260_4_20210310_00017.jpg



View of rodent holes on the landside slope. Spring 2021.

LM Start	2.61	Rating **	A/W	Issue No.	36
LM End	2.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.724457 °	38.724457 °
				-121.771757 °	-121.771757 °
DWR ID	DWR_ST0001_02_s_2017_36				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 South Levee	Right	11.48	03/09/2021 03/09/2021	Zach Jojola

LM Start	3.09	Rating **	C	Issue No.	18
LM End	3.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.720557 °	38.720557 °
				-121.764575 °	-121.764575 °
DWR ID	DWR_ST0001_02_f_2019_18				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
There is erosion around tree roots. Recommend backfilling.					

No Photos

LM Start	3.53	Rating **	A/W	Issue No.	2
LM End	3.60	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey			38.722138 °	38.723294 °
				-121.759736 °	-121.759588 °
DWR ID	DWR_ST0001_02_f_2018_2				
Comment Code					
Inspector Comment					
2017 Site ID: CHC 3.5 R					
Status: Eroding					
2017 Field Notes: Significant amount of debris along bank.					
Site History: 2010 - Large slump on the upper berm, a tree has recently slid down the slope. 2011 - Large slump and new erosion. 2012 - Slightly steeper slopes and cracks observed.					

Photo 1 of 1 : SP_2021_ST0001_260_2_20210308_00001.jpg



USACE 2013 Photo #1

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 South Levee	Right	11.48	03/09/2021 03/09/2021	Zach Jojola

LM Start	5.33	Rating **	A/W	Issue No.	11
LM End	5.37	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey			38.722933 °	38.723467 °
				-121.760561 °	-121.760436 °
DWR ID	DWR_ST0001_02_f_2018_11				
Comment Code					
Inspector Comment					
2017 Site ID: CHC 5.4 L Status: Eroding 2017 Field Notes: Site continues to erode due to recent high storm events. Site History: 2009 - Erosion into the levee slope. 2010 - Minor new erosion. 2011 - New erosion and a freshly fallen tree. 2012 - New animal holes and slightly steeper slopes. 2013 - New tree popout and 2 feet of erosion along the top bank.					

Photo 1 of 1 : SP_2021_ST0001_260_11_20210308_00008.jpg



USACE 2013 Photo #1

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

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2021

Sacramento Maintenance Yard Cache Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 East Training Levee of Cache Creek Settling Basin	Left	2.26	03/09/2021 03/09/2021	Zach Jojola

LM Start	2.26	Rating **	M	Issue No.	3
LM End	2.26	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.695416 °	38.695416 °
				-121.715943 °	-121.715943 °
DWR ID	DWR_ST0001_04_s_2017_3				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Scour on waterside levee slope at end of Unit 04 levee where previous access ramp was located. There is no visible active erosion at this time, however future high water events will likely cause further erosion into the levee prism.					
Site ID No:250					
Site Designation:LMA-58					

Photo 1 of 1 : SP_2021_ST0001_261_3_20210310_00001.jpg



View of erosion at previous access ramp. Spring 2021.

* 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
--	--	---	---